

PALESTINE EXPLORATION FUND.

ANNUAL

1912-1913.

DOUBLE VOLUME.

PUBLISHED BY ORDER OF THE COMMITTEE,

AND SOLD AT

THE OFFICES OF THE FUND, 2, HINDE STREET, MANCHESTER SQUARE, W.

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PHILISTINE VASE.

PALESTINE EXPLORATION FUND,
1912-1913.

EXCAVATIONS AT AIN SHEMS
(BETH-SHEMESH).

By DUNCAN MACKENZIE, Ph.D.

ILLUSTRATED BY PLANS AND DRAWINGS

By FRANCIS G. NEWTON,

AND BY PHOTOGRAPHS OF POTTERY AND OTHER OBJECTS
FOUND IN THE EXCAVATIONS.

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PALESTINE EXPLORATION FUND.

THE EXCAVATIONS AT AIN SHEMS,

APRIL TO JULY, 1912.

DR. MACKENZIE, in forwarding his report on the Excavations at Ain Shems, expressed very warmly his obligations to those who, officially or otherwise, had facilitated his operations, or rendered valuable assistance during the conduct of the work.

He first acknowledges the courtesy of His Excellency Halil Bey, Director of Antiquities at Constantinople, who granted him favourable credentials to the Director of Education at Jerusalem, interesting the latter in the work itself and in the solution of difficulties which arose in regard to the appointment of a new local Imperial Commissioner.

To our Consul, Mr. Satow (since transferred to Trebizond), he also expresses his gratitude both for prompt action in time of difficulty, and for the kindly personal interest shown as the work progressed. To Dr. Masterman, our Honorary Secretary at Jerusalem, he feels under deep obligation not only for his constant and friendly interest in the excavations, to which he paid frequent visits, but for his prompt and kind care and treatment of Mr. Newton, when he found the latter suffering from fever.

The visits of the French Dominicans of the École Biblique at Jerusalem, and especially of Père Hugues Vincent, were as welcome as they were sympathetic and often helpful, as were also those of the German Benedictines of Mount Sion.

Dr. Mackenzie also speaks of the cordial and friendly advice and help of Mr. Serapion Murad, now settled at Jaffa, an old friend of the Palestine Exploration Fund.—ED.

The Excavations at Ain Shems of the Palestine Exploration Fund for 1912 were started on Monday, April 22, and were concluded for the summer season on Saturday, July 27.

The Imperial Commissioner was Misbah Effendi, son of one of the Hereditary Guardians of Neby Daud. Our relations with him were throughout of the same cordial character as they had been with Ibrahim Effendi.

An obstacle to efficient and continuous work was a heavy wheat harvest in the Valley of Sorek instead of the late millet (*durrah*) harvest of the previous year, which, coming in our vacation in August and September, did not affect us at Ain Shems. A peculiar communal tenure of land makes the whole population of a given district turn out to such harvests with one accord. Any other work the villagers may happen to have been employed upon up till the moment of harvest is suddenly abandoned and one is left completely in the lurch. This happened at Ain Shems.

We noticed, however, that, of the five or six persons who remained, all without exception were men from villages at a distance who had no encumbrances in the way of women-folk about them. This gave us a hint as to the remedy. Did we have men from a distance with no harvest obligations, no women, and boys and barrows instead of those, we should become largely if not altogether free of local conditions of labour, involving the employment of women. We accordingly made the experiment and to our satisfaction found it a complete success. Young fellows not experienced for the better sort of work, who used to find it humiliating to carry baskets to the shoot with the women, and did it badly to boot, took to the barrows as if by a second nature. The foreman did not have to shout himself hoarse to women dawdling and chatting on the shoot, and in the absence of these the work proceeded evenly and with the greatest tranquillity and peace. Nobody was more agreeably surprised than the foreman himself.

But this salutary change did not rid us entirely of the inconvenience of the early harvest in the Valley of Sorek. On this occasion almost the entire community of Deir-Aban emigrated from their village homes and took up their abode in improvised huts all round the site. It was with dismay we arose one fine morning to find ourselves surrounded by this temporary village without realizing how it came to be there. After a prolonged period of occupation it was deserted at the end in the same mysterious manner. Somewhat late in the harvest season a census taken by our Commissioner gave

the result that there were 240 such huts with a population which was estimated at about 1,200 people.

What crowds were about us can be vividly realized by a glance at Fig. 1, which illustrates a scene of excitement at an outbreak of fire among the improvised huts to east of our camping ground of last year.



FIG. 1.—CROWD OF VILLAGERS.

It can readily be imagined that the presence of this considerable population was not favourable to the progress of work on the site. To isolate this, an important path along it from east to west had to be cut off entirely by digging away the passage at either end where the Strong Wall comes. To cross the trench we had to use temporary planks, which were removed every evening. Illicit visitations out of hours to our pottery heaps made it necessary for us to keep constant guard on the site. Baskets of pottery, which it was not possible, for want of room, to store up in the wely, were turned over out of malice, when our backs were turned. Sometimes this was done for the sake of the basket, but, when this was found thrown aside of the scattered pottery, the malice was clear. This caused us great surprise and disappointment, for the natives of Deir-Aban, with whom we had come into closer contact at the excavations, had always shown themselves, throughout our two seasons' campaign until

now, entirely well disposed towards us. It might perhaps have been feared in advance that the war between Italy and Turkey would have the effect of developing a sullen temper towards strangers. On the contrary not the faintest echo of that ever reached Ain Shems. The real explanation was probably this. Among the people who set up the improvised village about the site were certain persons from Hebron who opened a sort of *Café-shops* to cater for the poor needs of the villagers. There were several of these Hebronites. The Hebronites are notorious in all Palestine for their fanatical sullenness, and it seems clear that it was they who created the *morose* attitude towards us which we began to notice among our own people of Deir-Aban. It was they who were probably responsible for the overturned pottery baskets, and it was they who stoned us. Of this we had clear proof.

A party of English people from Jerusalem had been to visit us and we had just descended from the wely to go to the station. Several stones were suddenly thrown at us, including one which hit myself. I said at once to the Commissioner, who was with us, that it was the Hebronites. He was unwilling to agree, but on our return I traced the culprits to one of the Hebronite tents, where they were all sitting together at the back, too conscious to conceal their guilt. At our instance the Commissioner hastened the departure of those who were to blame.

A more serious drawback was the occupation of the entire cemetery on the north side of the site by the improvised huts. Investigations in the necropolis in the quiet harvest season, to which we had been looking forward, were thus rendered entirely impossible. We had to fall back on the possibility of tombs at a distance, and these, with the exception of a plundered grotto sepulchre, turned out to be of late date and of no interest for the history of Beth-shemesh. The hygienic conditions of the environment, bad enough in themselves to account for the highly malarial character of the district, were not improved by the presence of this adventitious population. There was not the remotest attempt at any sort of cleanliness, diet was of the very poorest character, and fever and other maladies of the advancing summer, such as dysentery, were soon rife. The wely became a sort of dispensary and I had to devote considerable time every evening to doling out quinine and other remedies after the fatigues of the day. The inconvenience of all this was that one got the reputation of being a great medicine-man who worked by magic, and the maimed, the halt and the blind (from ophthalmia) came from places as far away as Beit Jibrin.

The sources of the malaria are undoubtedly to be sought in the pools of stagnating water in the valleys. To the passenger by train, between Jerusalem and Jaffa, the Valley of Sorek seems entirely dry as early as April or May; but if one goes on foot and follows the river-bed one may still see the stagnating pools here and there in the late summer.

Wady Bulus again is never really dry, and the marshy meadows here account for the frequency of fever among the boys and the Brothers of the Convent at Beit Gemâl. The Italians there know, of course, that it is the mosquitoes bred in the pool that are responsible for the spread of the fever, but the fellahin who work for them still attribute the fever directly to the miasma from the stagnant water. There is some truth in this, for the air itself is undoubtedly bad in such regions and smells bad, but what the fellahin do not understand is that drinking the water from such pools is a fertile source of ill-health. The well of Temêd itself, which is the one great source of water in the whole region, is right in the river-bed, and is simply supplied from the stagnating pools further up the main valley.

It was announced at the last Annual Meeting that we should be returning to our old camping ground early in June. By that time the corn on the spot had been reaped, but to our dismay the huts of the fellahin were already there before us. We saw the improvised huts being put up all over the place one morning with an excited crowd of men, women and children, as if it were all a migration from a distant land.

But the migratory spirit is never entirely of a local character in the unchanging East. The caravan route from Egypt comes by way of the wilderness of Beersheba, and it passes Beth-shemesh as of yore. Beth-shemesh itself has been but a desolation since the days when Sennacherib swept the country with his armies on his way from Nineveh to Lachish. But nothing would sweep an ancient camel track out of existence short of some convulsion of nature. It was perhaps Sennacherib who destroyed Beth-shemesh as he advanced on Lachish; but he would do nothing to the old caravan route but take it on his way. It is there still, and it brings to the Valley of Sorek or to Ajalon the wandering tribes of the south as it did thousands of years ago. A strange cavalcade of "Nur" gipsies from the confines of Egypt could be seen on more than one occasion passing in long slow procession by the wely of Ain Shems and then winding down, as by immemorial instinct, towards an old camping ground among the olives. Such a tribe of the Nur was in possession

there by the end of June (Fig. 2). Not favourably looked upon by the local fellahin, they left at last as the outcome of an animated quarrel with the women of Deir-Aban occupying the huts behind.

Visitors to the site will well remember the amenities of our camping ground of last year, and readers of the *Quarterly Statement* for July, 1911, may still have in mind Père Vincent's mention of that "belle oliveraie." But, alas, we found that olive grove this year a field of growing corn, and this initial obstacle to our occupying the spot induced us for the earlier part of the season to seek once more a hospitable shelter in the Salesian Convent of Beit Gemâl.

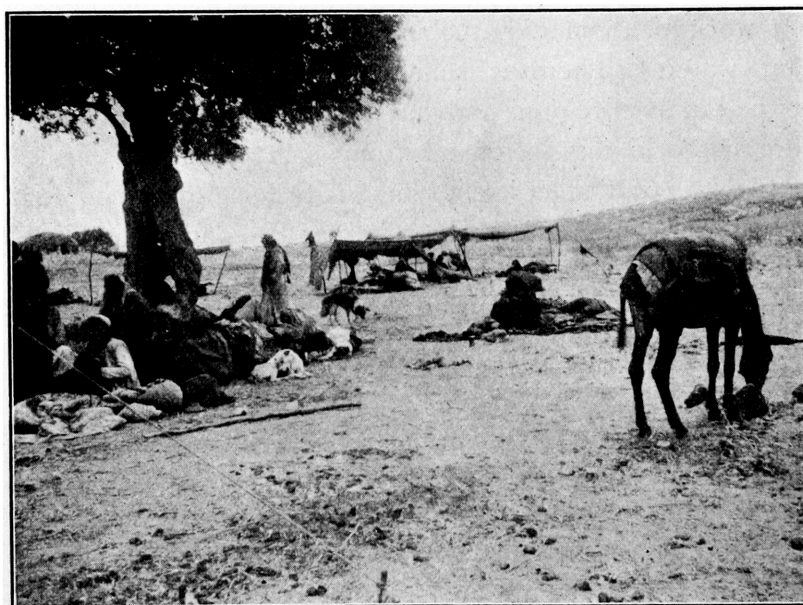


FIG. 2.—CAMP OF GIPSIES.

We shall always think of the Brothers here with gratitude for many acts of true kindness and for genial company in the relaxation of evening hours.* The convent is perhaps the most imposing headquarters of excavation the Fund has ever had in Palestine, as may appear from the view shown in Fig. 3.

* The Convent on its eminence forms a commanding background to Wady Bulus, half-an-hour away from Ain Shems to the south. Originally a personal gift by the late Marquess of Bute to Don Belloni and his mission (at Bethlehem) among the Arab waifs and strays of Syria, it passed to the Salesian Brothers when Don Belloni affiliated his mission to the congregation of Don Bosco.

Long before the arrival of the gipsy caravans it was clear that our old camping ground would not be available now.

The olive grove we chose at last is shown in Fig. 4, and is situated some twelve minutes away to eastward up the same long limestone ridge, on the western span of which (at the exit of Wady Bulus) Beth-shemesh itself is built.

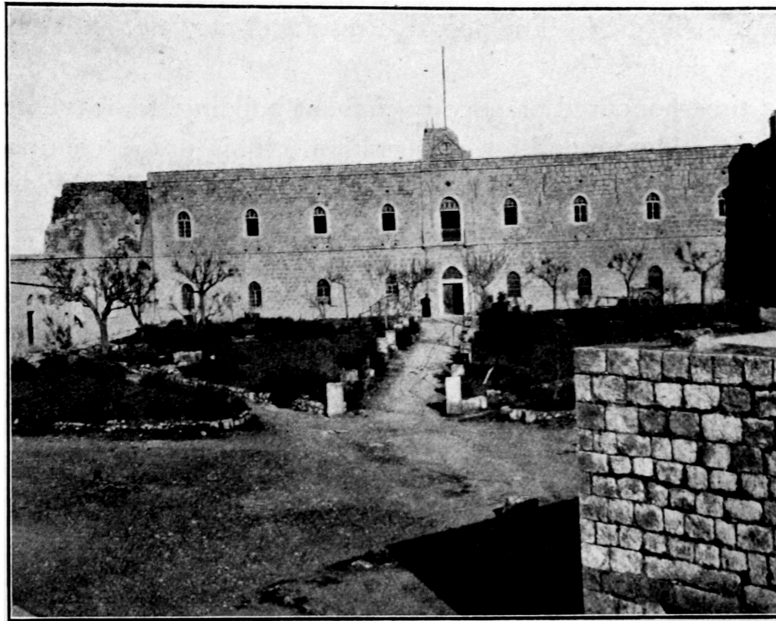


FIG. 3.—CONVENT OF BEIT GEMÂL.

The terraced fields at lower levels among the olives were green with durrah, which, with the summer flowers among the massive boulders, gave an aspect of spring to the spot. The durrah meant a belated harvest towards the end of summer and that a present peace to us. The outlook of the terrace was westward towards the Valley of Sorek and as far as Askelon and the sea.

THE EXCAVATION.

The excavations at Beth-shemesh of 1912—except for a couple of days set aside in search of the still undiscovered Byzantine Church—were exclusively devoted to explorations in the Semitic levels of the city. These explorations included some subsidiary work at intervals in tracing out the direction of the Fortification Walls where these are concealed beneath the floors and foundations of the Byzantine Convent, and in establishing the width of the wall at

different points by exposure of its inner face at suitable intervals all round the site.

It may be convenient to say in advance that our search for the Byzantine Church led to entirely negative results.* Was it ever built? That was the question that now began to force itself upon us. Even last year we began to doubt whether the convent "was ever entirely finished when the period of Arabic conquests began." The negative results of our later search seem now to confirm those doubts.

It was a time-honoured practice in convent building to leave to the last the erection of the church and its consecration. This usage continues to the

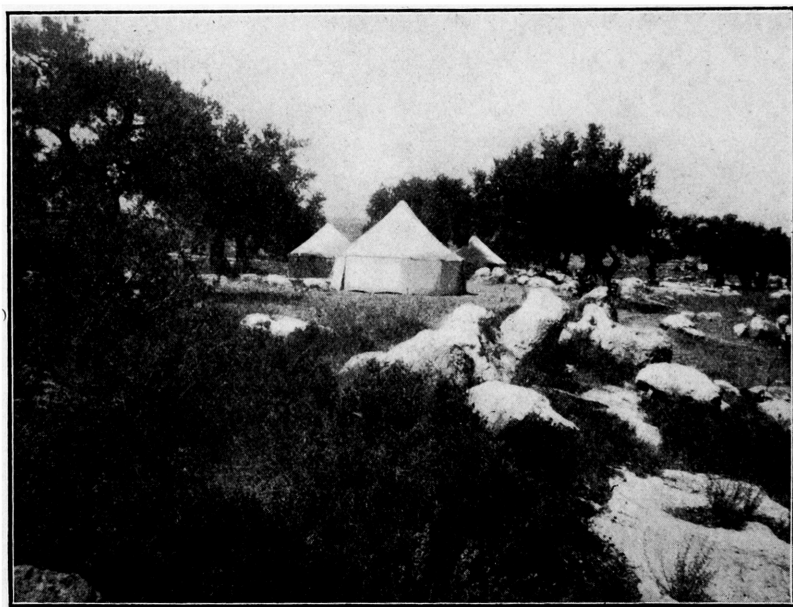


FIG. 4.—NEW CAMP AT BETH-SHEMESH, LOOKING S.W.

present day. It thus sometimes happens that the church is lacking, even after the convent itself has been occupied, Divine Service being then carried on in an improvised chapel within the cloisters.

Indeed, at the Convent of Beit Gemâl close by, which I have referred to already as our headquarters, we have an analogy at first hand. In talking to the Fathers here of the Convent at Ain Shems we have expressed our doubts as to whether the church was ever built. They at once pointed to their own

* See *Annual*, No. 1, pp. 82-83.

case. The church at Beit Gemâl has never been finished and Mass is still said in a gallery consecrated for the purpose at the east end of the ground floor corridor. We have further consulted Père Vincent on the spot about our doubts, assigning our reasons, and he has given it as his opinion that our doubts are probably justified.

It was a momentary disappointment to us to find that the Semitic deposits underlying the Byzantine Convent were even more disturbed than we had anticipated in advance. But our plan of campaign for the present season was more essentially concerned with the central regions of the city extending northwards from the South Gate (see Plate I). It did not seem well to us to expend much labour there unless with some hope of realizing the promises afforded by our discovery on this spot, in the previous year,* of a fine painted "Philistine" vase (Frontispiece).

To the south of the cistern chamber in the Central Court we set out a trench running east-west, and our starting operations at once revealed the disturbed condition of the upper Semitic deposits, especially alongside the foundations of the Byzantine walls. But the threefold character of the Semitic stratification was sufficiently clear, and a welcome landmark was afforded us by the occurrence in the middle stratum of a painted "Philistine" sherd with detached spirals (Plate XII, 20). These spirals were connected by an oblique band between one spiral and another. This gives an appearance of continuity which is not there in fact, though it is reminiscent of a time when the continuity was there.

The suggested Ægean affinities of this painted "Philistine" pottery had led us to expect something more characteristic than the somewhat stiff geometric panel style of the vase discovered the previous year. Therefore, the spirals were more than welcome, their occurrence seemed even suggestive. Such discontinuous spirals are characteristic of the "Mycenæan" style of Cyprus and Rhodes which corresponds to the Cretan manner of the Third Late Minoan Period. But in Crete itself the spirals are usually more continuous, and the question occurs whether the broken spirals did not penetrate to Palestine from an environment other than Crete and possibly nearer to that of Cyprus and Rhodes. The excavations of the previous year, like others of the Fund in Palestine, have brought out the fact that ware of Ægean and Cypriote provenance was currently imported into Syria in the Third Late

* *Annual*, No. 1, p. 84.

Minoan Period of Crete. But we must be on our guard against the suggestion that the painted Philistine pottery was a mere slavish imitation of models that were at hand on the spot. The imported Ægean ware was found to occur deeper down in the deposits, and so to belong to an earlier stratum. Thus what we have got in the "Philistine" pottery is Ægeo-Mycenæan tradition, not a cheap contemporary substitute for the imported ware, made on the spot. The imported Ægean ware with lustrous glaze of the previous period has affinities that point in the direction of Crete: the Philistine ware (notwithstanding the spirals of the fragment we have been discussing) strangely enough points emphatically towards Mycenæ. The painted vase, with bird-panel and quasi-geometric decoration, found in the Byzantine area itself (Frontispiece),* is a case in point. This panel or "metope" style does not penetrate into Crete until towards the very end of the late Minoan Age; when it does so one suspects at once that it was from the Mycenæan world of Greece, where this style, at the period to which we refer, was much more at home than it ever was in Crete.

Our more important investigations in the central regions of the city connected with the South Gate were carried on as much as was possible alongside those in the Semitic regions of the Byzantine Area. It soon began to appear that the results were likely to be much more satisfactory than these, and this for the reason that the Semitic deposits were much less disturbed. They were less disturbed because there was little or no evidence of any Byzantine or Arabic occupation comparable to that which we had verified in the East regions of the site. The most startling addition to our knowledge of the stratification of the South Gate was the evidence that the city had been burnt to the ground a second time. The two successive burnt strata can be distinguished even on the photographs taken recently. It was perhaps even a greater surprise to us that the pottery which turned up in the second burnt stratum was similar to what had previously been found in the chamber tombs with divans of the North-West Necropolis. And these tombs we had gradually come to attribute to the period of Israelite domination at Beth-shemesh which is contemporary with the Dual Monarchy. Local conditions, combined with other circumstances, would make this mean that the burning of the city for the second time, and the final closing of the tombs, must have occurred some time in the period about 700 B.C. It is therefore

* See also *The Excavation of Gezer*, Plates CLXV and CLXVIII.

reasonable to suggest that the final destruction of Beth-shemesh may have been the work of Sennacherib while on his way from Nineveh to Lachish.*

It must be admitted that such an act would be little out of keeping with the spirit of destruction characteristic of Sennacherib's military policy, for the Assyrian host destroyed everything in its way. Sennacherib's strategy in advance was to put western Judah to fire and sword before dictating terms of peace to King Hezekiah from his camp at Lachish,† Egypt would come next!

Two burnt cities at Beth-shemesh would mean two sieges or invasions, and the archæological argument for both is based on the twofold stratification of the sun-dried brick deposits in the region of the South Gate. The argument is based upon the fact that sun-dried bricks are not fired to begin with and that, accordingly, when in spite of this they bear all the marks of having been subjected to the action of fire this can only have been while they were in position in house or walls. In other words, the argument is that burnt sun-dried bricks in any particular case mean the burning of a house and that such bricks, when they occur all over a city site, signify the burning of that city as a whole. The conclusion is that a conflagration of so general a character could hardly be anything else than the result of invasion or siege.

We have spoken of two burnt cities at Beth-shemesh, and yet we have elsewhere repeatedly referred to the threefold character of the stratification at Ain Shems. Here there is a seeming contradiction which I have tried to explain to visitors on the site. How is it, then, that we have got a threefold stratification of the Semitic deposits within the city, and only a twofold one in the South Gateway?

The explanation is, that, while within the city the level as a whole is gradually rising through the rebuilding of particular houses of the city, a gateway has always to be kept clear of débris as long as that gateway continues in use. Thus it comes about that in the South Gate the only record we have of early Beth-shemesh is the South Gate itself. There is no débris at all there representative of the long period intervening between the building of the city walls and the siege represented by the burnt sun-dried bricks which we found filling up the gateway. On the other hand, that accumulation of early débris is common enough all over the city within the walls. For the sake of clearness we must bear in mind that by this débris, unrepresented in the South Gateway,

* 2 Kings xviii, 13-17.

† 2 Kings xix, 10-13.

we mean in the first instance the gradually accumulated deposits of the First Period and the First City at Beth-shemesh.

For further clearness it has to be understood that the débris of burnt sun-dried bricks filling up the gateway represents not the gradual accumulation of centuries, but the catastrophe of a moment, and this moment, as it would seem from the evidence so far acquired, was the final one in the history of the Second Period and the Second City at Beth-shemesh. That is to say that, if we are right, the gradual accumulation of débris of the Second Period at Beth-shemesh is no more represented in the gateway than were deposits of the First Period. The gateway simply continued in existence with its floor at the same level through both periods, and then suddenly went out of use.

But the history of the city did not cease with the filling-up and disappearance of the gateway. The second red burnt stratum referred to above represents débris of the Third Period, and of the Third City at Beth-shemesh. It is this Third City that we think may have been destroyed by Sennacherib. This destruction of Beth-shemesh can hardly be called a siege, for the Third City had no South Gate and no Strong Walls. What we have called the Second Red Burnt Stratum forms a layer above these which hides them out of sight.

Our excavations in the central regions of the city (Central City Area and the High Place Area) brought out the threefold sequence in the stratification clearly enough. And here it was noticed at once that the earlier periods not represented in the stratification of the South Gate were indicated by massive deposits of gradually accumulated débris which went down to the rock.

The earliest layer of deposit, that next the rock, was found to go up to floor-levels which occurred here and there all over the area excavated, and so could be said to be of a general character, and to represent the closing of one period and the beginning of another. A notable chronological landmark in the débris of this earliest stratum was the occasional occurrence, well up in it, of fragments of imported Ægean pottery, alongside of contemporary Cypriote sherds, such as in Egypt belong to the same context as the Tell-el-Amarna Letters. And it is well known that Petrie found Ægean pottery of the kind I refer to at Tell-el-Amarna itself. There it is referable, in a general way, to the era of the XVIIIth Dynasty, while in Crete it is characteristic of the Third Late Minoan Period.*

* With this discovery have now to be correlated the results brought out the previous year in the East Grotto Area, see *Annual*, No. 1, pp. 61-72, fig. 14.

It is important to remember that this Ægean pottery does not usually represent that latest phase of the Third Late Minoan Period when the panel or metope style is already in vogue, but an earlier period of steady trade relations which brought Ægean products from Crete or Rhodes in such vessels as far as Palestine and Egypt. In this busy life of sea-trade with Palestine and Egypt, Cyprus also played her part. The intrusion of the "metope" style we have referred to above would seem, on the other hand, to be connected with events of a disturbing character on the Ægean main, which must have meant, for one thing, the end of Cretan domination at sea. The end of the Cretan Sea-Empire meant in turn the cessation of all important trade relations between the Cretan world and the coasts of Egypt and Philistia.

Events at sea that carried with them such far-reaching consequences were bound to leave a record of themselves which justify us in making them a dividing line in history. There is hardly any doubt that, even far inland of Beth-shemesh, such a landmark in history comes with the close of the XVIIIth Dynasty in Egypt, how much more then for cities of the Philistine coast land like Askelon or Gaza!

If, now, we make our dividing line in history coincide with the end of the "Tell-el-Amarna" period and the cessation of Cretan trade-relations with the coasts of Palestine and Egypt, we shall not be surprised to find no Ægean pottery turning up at higher levels on the site. The results brought out in the middle or second stratum of our first great trench in the Central City Area were, in this respect, entirely confirmative of our previous guesses, founded upon our investigations in the Central Court of the Byzantine Convent. Once more there was no imported Ægean pottery in this middle stratum; and once more there was the new landmark in history afforded by the presence of the characteristic-painted Philistine pottery. The imported Ægean and Cypriote pottery clearly belonged to the deeper and earlier stratum. This, in chronological terms, can only mean that the imported Ægean pottery was no longer in vogue at the later time to which the painted Philistine ware belongs.

The most important finds as yet made by us in this style were two vases partially preserved in fragments, which will be described in their proper connection. They were found in this middle stratum, beneath the floor of a house in sun-dried bricks of the Third Beth-shemesh Period, in the Central City Area. Both vases, with their succession of spirals on the shoulder, preserve Ægean traditions to a remarkable degree. On the other

hand it rather significantly happened that one of the vases was a "krater,"* an open jar with two handles, such as is highly characteristic of the mainland of Greece towards the end of the Mycenæan Age. There it turns up suddenly with the first appearance of the panel or "metope" style, and the practice of cremation. This type of cremation krater is indeed essentially the same as the famous "Warrior" vase of Mycenæ. Its appearance in Crete and the Ægean is entirely intrusive, and its function there in connection with the practice of cremation is one of the symptoms that are significant of the final break-up of the Cretan polity.

It was a fortunate circumstance that these new characteristic-painted vases were found under conditions of the stratification which made entirely clear their relation to what was earlier and later on the spot.

We had now, however, got so far with our general understanding of the stratification that nothing would have surprised us more than to find ware of this kind in that Third Period house itself.

With the period to which the house is to be assigned we are in a world in which Philistine influence has declined and painted pottery of any kind (except for an occasional band or two in matt red or black) is henceforth a thing almost absolutely unknown.

It is once more the old Canaanite world that is revealed to us, though a Canaanite world under a new external influence which is no longer that of the Philistines but of Israel. The first thing that struck us was that the pottery and other objects that occurred in the débris of this city were identical with those that we had seen in what we have called the Second Burnt Stratum in the Area of the South Gate. In archæological investigation it is all important to be able to establish equations of this kind, and we could now further see that the deposits in both areas had to be equated with those of the divan chamber tombs of the North-West Necropolis. It seemed, moreover, abundantly clear that the deposits of the Second Burnt Stratum in the South Gateway were deposits of the Third City of Beth-shemesh.

A great new trench set out in the Central City Area, but more in the direction of the South Gate, presented all these phenomena of stratification with a difference. This did not concern the sequence of the strata but the individual character of the deposits.

Intramural burial had hitherto been to us a new thing at Beth-shemesh.

* See Plate XVI.

On getting down to the rock in the East part of the new trench this was found at one point to present a void of somewhat triangular shape filled up with débris. When this was sufficiently cleared, all sherds contained in it being carefully collected, we found ourselves in the interior of a natural grotto in which all the paraphernalia of the cult of the dead appeared partially exposed to view. Vases of different kinds, characteristic of the First Beth-shemesh Period, were grouped about in their original positions, among them being prominent a type of water-jar rounded at the base and with a handle on either side at the shoulder such as survives through all the periods of history at Beth-shemesh. It is the same type of jar that in the Israelite period is found occasionally to have the well-known stamped handles that have so much interested the archæologist as well as the Hebrew epigraphist.

In its own connection, however, it will appear that those earlier jars are of a much more handsome shape than the derivative forms of a later time. All the smaller vessels found with these jars had the same refinement and elegance of appearance. The pottery was wheel-made, and another indication that we were in the Bronze Age was afforded by the glimpse of crumbled bronze from some weapon that had been placed near one of the vessels. With some clearing the remains of seven or eight persons could be discerned lying about in the recesses of the cave but, until the cave should be completely explored, we could never say that there were not more.

In the débris a little above the rock outside the cave occurred some characteristic-painted Cypriote sherds, including fragments of wish-bone handle bowls. The Cypriote sherds indicate a context contemporary once more with the XVIIIth Dynasty in Egypt. Nothing, however, of the kind appeared in the grotto itself and for this reason it perhaps ought to be assigned to a still earlier period, anterior it might be to the fifteenth century B.C.

The new trench was rich in surprises. There was a surprise for each stratum and for each period. But the intramural burial grotto hardly prepared us for the subterranean chamber hewn in the rock which emerged alongside in the same trench. The entrance to this consisted of a vertical shaft hewn in the rock beside the chamber, and built up with a parapet of rough masonry to the level of floors of the middle stratum. The hypogeum—or whatever it was—could thus in its later, if not also in its earlier history, be seen to belong to the Second City of Beth-shemesh. A remarkable and instructive phenomenon was that the disintegrated limestone, cleared out of the hypogeum when it was hewn, was found spread in a layer a foot or less thick all over the area round

about. This pale layer extended also eastwards above the burial grotto, and it was significant that the Cypriote sherds, referred to above, were found beneath the stratum of limestone rubbish.

First in the order of discovery in this trench, though last in the sequence of history, were five curious bactyl-like pillars that emerged lying on their sides in the middle of the area. It can be understood at once that this prostrate position detracted much from the monumental appearance of these pillars, but it was clear that we had brought to light a Canaanite sanctuary of Beth-shemesh. From their high level and their relation to adjoining house floors, they evidently belonged to the Third City and the Third Period of Beth-shemesh.

This Third Period is that of Israelite influence and domination at Beth-shemesh, but while there are other indications that the conquerors who levelled the city walls to the ground did not destroy the earlier Canaanite population root and branch, the High Place, with its multiplication of bactyls or sacred pillars, may be a sign that the citizens of Beth-shemesh still clung to their ancestor worship, their cult of canonized heroes, and their adoration of divinities of the *polytheistic* cult of Canaan that never had any earthly history.

The Third City of Beth-shemesh was burnt to the ground, and it has been suggested above that this was possibly by Sennacherib and his army as he passed on to Lachish. It may thus have been the Assyrian host that knocked down the Sacred Pillars of Beth-shemesh, and it is noteworthy that one of these is smashed in two as if on purpose. But if this be so, Sennacherib is not to be regarded as vice-gerent of Jehovah against an idolatrous Israel, but that he acted as an Oriental potentate showing a devastated country the nullity of its gods.

We must not conclude this general sketch of the results of the excavation without some reference to one more discovery made in the environment of the High Place at Beth-shemesh.

Every excavator knows how sometimes interesting developments crowd in rapid succession to dull periods. This was the case at Beth-shemesh just as we were thinking of winding up for the hot season, and for lack of funds. The High Place, the mysterious hypogeum or underground chamber, the intramural grotto sepulchre of the earliest ancestors of the Beth-shemites, all came in such quick succession just before the end as to seem like the exciting dénouement of a drama.

It was a drama with a closing chorus. Not far away from the Sanctuary of Beth-shemesh a well-mouth in massive masonry had come into view just to the right of the way towards the South Gate. The water supply of Old Beth-shemesh had been discovered as it existed in Israelite days and later, perhaps indeed the very well which gives that name to Ain Shems that has lasted to the present day. It was then that our fellahin workmen intoned their stirring chorus : " Water of Ain Shems ! Water for Deir-Aban ! "

THE FORTIFICATION WALLS.

In the previous year we could only guess the probable course of the Strong Wall as it lies concealed beneath the later remains of the Byzantine Area. It has now been amply made clear by means of exploration shafts or tunnels made at intervals along its course.

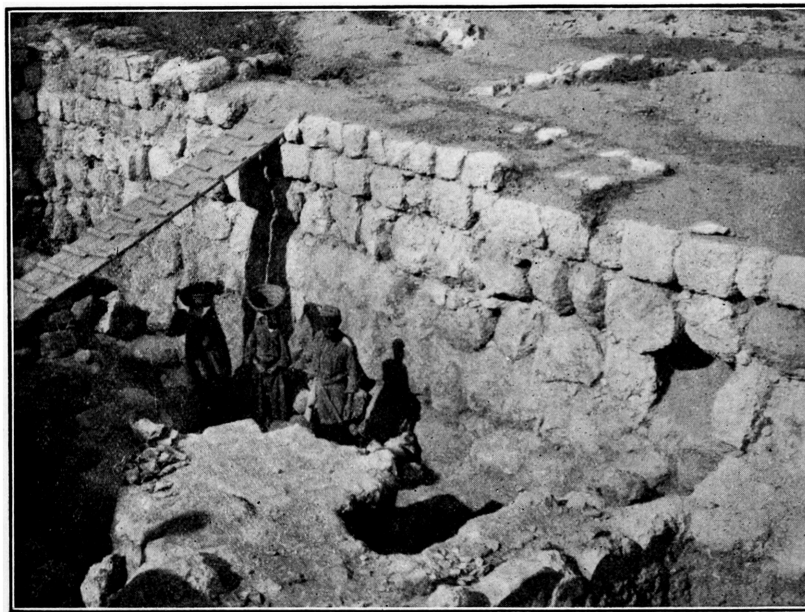


FIG. 5.—EAST WALL OF BYZANTINE CONVENT.

It had already been made out that the east wall of the convent rests on the Strong Wall as foundation.* The completion of the excavation here, on the interior side, has made this entirely clear, as will be seen from the view shown in Fig. 5. Here the massive masonry of the fortification, in large rough

* *Annual*, No. 1, p. 84.

blocks, is discernible below, while the ashlar construction of the convent wall is visible in part of three courses above. The Strong Wall runs in a southerly direction to a point a few feet beyond the right end of the picture and then is lost just at the point where a cross wall, of Arabic date, cuts the East Gallery of the convent into two. From this point onward, however, it is noticeable that the ashlar masonry of the current wall is carried down to the lower courses as it proceeds towards the south-east angle of the building. This fact led us to surmise that the Strong Wall must have deviated in a south-west or west direction at the point where it was found to stop short.

To ascertain whether this was so, we had recourse to sinking shafts at intervals in the direction conjectured to have been taken by the wall. To understand the result of this investigation it will be helpful to consult Mr. F. G. Newton's Plan of the Byzantine Area which shows the course of the Strong Wall at the different points where it was successfully tapped (Plate I). In order to catch the wall on either face we had recourse to transverse cuttings which became a shaft going down to the rock once the wall was touched. The encumbrance offered by the massive later constructions made it occasionally necessary to seek for the inner or the outer face as the case might be. It was only at one or two points that we were able to get at the wall in its whole width.

It was tantalizing that, at the very point where we supposed the wall to have turned south-west, it had disappeared to the very foundations. It may conveniently have cut across the floor-level of the East Gallery; at any rate, it was clear that the materials had been amply drawn upon in building up the massive convent wall foundations on either hand. The rough foundations of the west wall of the Gallery betray the fact, and the top-most course of rough foundation, even on the east side, is not the Strong Wall *in situ* but an addition.

We had better luck in the Central Court of the convent. In the south-east region of this we were able to tap the wall twice on its inside, once just outside the south door of the East Gallery and once again to left of the east door of the South Gallery. The south-east direction taken by the Strong Wall was thus made entirely clear. In both cases, however, the Strong Wall happened to be near the line taken by the convent foundations, and it could be seen at once that the materials conveniently at hand were amply drawn upon. In either instance, the outer face of the wall had been so pulled about as to be scarcely discernible, but the massive stones that had been removed could be seen alongside in the convent wall foundations.

Let us now enter the South Gallery by the doorway referred to above. This gallery, like the other two, has two doorways giving access to it from the Central Court. Looking north, towards the doorways, one notices that the stretch of massive convent wall between these doors now shows above the floor level three courses of rough megalithic-looking masonry which at first sight might or might not be the fortification wall in position. In order to make

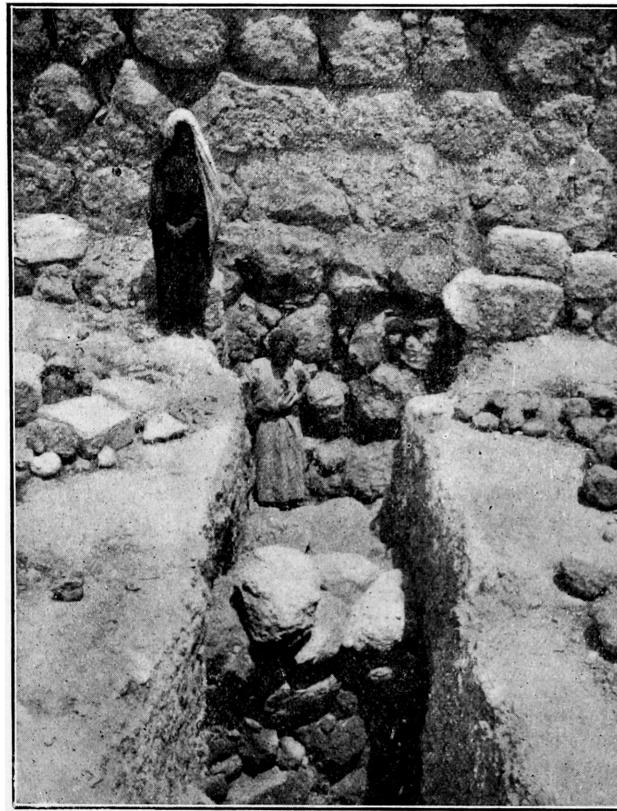


FIG. 6.—ANCIENT CITY WALL WITH WALL OF CONVENT IN BACKGROUND.

sure we sank a shaft a little more than half-way along in the direction of the west doorway. The result appears in the picture, Fig. 6. The supposed Strong Wall (behind the woman in the picture) turned out to be spurious, while the real wall appears passing obliquely south-west (in front of the man in the trench). Here it could be seen once more how liberally the builders of the convent had drawn upon the materials at hand.

The width of the wall at this point was 2·25 metres (= 7 feet 5 inches) which would be equivalent to $4\frac{1}{2}$ cubits. It is interesting to note that this width is apt to recur.* By tunnelling right and left it was found that we had chanced to tap the wall where a shallow bastion came. This was 5 metres long and had a projection of 75 centimetre. If we translate those measurements roughly into terms of the cubit we find that additions, and what would seem standard divisions of this, receive illustration here once more. It is what might be expected in practice in measuring out for city walls.

The last shaft sunk in the Byzantine Area was in the south-west corner of the South Gallery just where the convent bastion occurs. Here the Strong Wall was exposed on its inner face and was found to go down to fallen boulders, which made it inconvenient for us to touch the rock. But elsewhere the wall was found to rest on the rock, and thus to belong to the original construction. From the South-West Bastion of the convent onwards the fortifications had been traced continuously all round the city in the course of our first campaign.†

THE CHRONOLOGY OF THE FORTIFICATION WALLS.

There remains the question of the chronology of the Fortification Walls. There is hardly any doubt that Beth-shemesh was a fortified city in the First Period of its history. Though it is impossible to go into much detail, since our investigations were carried out largely by means of tunnels underground, it can with a fair amount of certainty be set down that all the construction, which is of uniform appearance and goes down to the rock, belongs to this earliest period. Put in terms of comparative chronology this would mean an era anterior to the close of the XVIIIth Dynasty in Egypt. To this First Beth-shemesh Period would belong the characteristic North-East Bastion, the South Gate, and all such bastions as have the same massive construction and go down to the rock.

So far as we at present know the only period that still remains to be taken into consideration in discussing the chronology of the Fortification Walls is the Second Beth-shemesh Period. The reason of this is that in the course of this year's campaign it appeared to us to be made out with reasonable certainty that the Third City of Beth-shemesh had no fortifications.

* Compare *Annual*, No. 1, pp. 84-5.

† *Annual*, No. 1, pp. 84-9.

To the Second Period of Beth-shemesh then, we would assign the extensive repairs to the Strong Wall which we were able to verify in the region to west of the South Gate. In this should be included the South-West Bastion. Further alterations and repairs were found to have been carried out in the north part of the Strong Wall, especially in the region to west of the North-East Bastion. A later bastion alongside this on the west side suffers manifestly by comparison on account of its hurried, somewhat poor work, resting on subsoil débris instead of on the rock. Some of the repairs have, indeed, such an appearance of hurry, that they can hardly be called more than a filling up of breaches in a period of war or after it. Line within line of such repairs were noticeable all over this region, and it is even a question whether the original necessity for such apparently frequent patching up of the wall may not have been due to some defect in the limestone formation involving gradual subsidence of the rock surface at this part. Such gradual subsidence is a natural process which is still going on all over the region of Ain Shems, and there is even an example of it at the very doors of Beth-shemesh in the East Grotto Area.* This is also, possibly, the reason why the Fortification Walls are not built on to the edge of the rock bluffs but considerably back from these. The set-back in question is particularly apparent on the south-west and west sides.

Whatever the reason for the frequent repairs on the north side there is no doubt that of all parts of the Strong Wall explored by us this seemed the most vulnerable and the one most frequently breached by the enemies of Beth-shemesh. The manifestly hurried repairs tell their own story in this respect.

THE CHRONOLOGY OF THE SOUTH GATE.

Any clear ideas we possess regarding the history of the Fortification Walls at Beth-shemesh are derived from our explorations in the region of the South Gate. That this was an original and intrinsic part of the system is obvious. But all this, of course, says nothing as to the general period in Oriental history to which the system itself has to be assigned. The data towards a conclusion are usually no longer there by the time a system like the South Gateway has been sufficiently cleared to be intelligible to observation.

* *Annual*, No. 1, pp. 61-2.

These data for the most part consist of broken pottery, the meaning of which only an expert can read. This has to be examined if possible before it is removed from its environment, and then kept together according to its provenance and context.

An experience in point will illustrate this. Father Hugues Vincent, of the École Biblique at Jerusalem, observed a heap of this kind by the side of the North-East Bastion, and on learning that the sherds were from next the rock at the foot of the wall, he concluded, from the position and character of those, that the bastion was already in existence when the sherds were thrown out, and that accordingly the construction itself must be dated to some period anterior to 1500-1400 B.C.

The pottery found on the floor of the guard room on the west side of the South Gate was of great importance in this respect. Among native wares of an early date there turned up parts of a painted Cypriote bowl with wish-bone handle, the type of which in Cyprus may go back to the era about 1500 B.C. The presence of the Cypriote fragments affords a comparative date for the native wares in whose company the Cypriote vase was found, and all taken together would indicate that the room in which they occurred, and so the gateway, as a whole, went back to a still earlier period.

There is, however, further confirmation of this dating elsewhere in the environment of the South Gate. In the north-east bastion of this occurred the fragments of a store-jar with finely hand-polished buff-brown slip, which we are now able to identify as of a fabric similar to that of the vases of the First Beth-shemesh Period found in the Grotto Sepulchre of the High Place Area. The vase in question must have got into the environment in which it was found after the bastion and the connected gateway were built. The massive foundations of the original part of the Strong Wall go down to a bed of rock prepared for them and it is hardly to be assumed that much pottery of this kind, especially entire jars of considerable size, would have been left about at the time of preparatory clearing and levelling away which preceded the laying of these foundations.

It is a curious phenomenon of stratification that the South Gate presents us with a blank in history from the moment of its building until the time came when it suddenly ceased to be used as an entrance into the city. The reason of this, as has been suggested already, is that as long as the gateway was in practical use as a thoroughfare, no accumulation of débris could easily take place there.

The filling up of the gateway took place suddenly, just at the very end. And this was a result of that great siege of Beth-shemesh with fire and sword of which we have a striking record in what we have called the Red Burnt Stratum.*

EXCAVATIONS IN THE AREA OF THE SOUTH GATE.

But who were the besiegers, and who the besieged? This was a question we had asked last year and a question it would have been difficult to answer before we discovered the rock-cut chamber tombs of the North-West Necropolis. With that discovery we have the prior question emerging as a problem of excavation: with what deposits of habitation within the city would the contents of these tombs be found to correspond?

The answer came in the form of a rather unexpected archaeological equation when we began our new excavations this year in the Area of the South Gate. Some subsidiary work had been done here in the winter while we were clearing up doubtful points with a view to the publication of the first volume of the *Annual*. In the course of this we removed the débris encumbering the gateway layer by layer, keeping the pottery separate according to depths and noting any change in the stratification. When all the débris was removed the result on the north side was a section in the deposits going east-west a foot or so to south of the north edge of the trench of the previous year.†

This cutting presented an extraordinary appearance. It was packed full, from bottom to top, with sun-dried bricks, all out of position as they would be had they tumbled down from walls above. The sun-dried bricks were burnt red and it was clear that we had here once more our Red Burnt Stratum. We had thus got back once more to our previous idea of a siege of Beth-shemesh, but we got no further then.

There was nothing in the entrance itself noticed at the time which could indicate what happened after the siege except the significant fact that the gateway, once it was filled up with its encumbrance of débris, was never used again. The history of Beth-shemesh, we thought, ended there!

* *Annual*, No. 1, pp. 91-94.

† See *Annual*, No. 1, Plate XIV.

That this was by no means the case was a discovery that remained to be made in the course of the campaign of 1912.

The stratification of the gateway, always kept clear of *débris* until the end, was one that concerned, as we have seen, the final period in its history. It would be different in the areas immediately within the walls. Here floor-levels would rise gradually and with more constant and continuous accumulation of *débris* than in the main thoroughfare of the city.

We began with the interior area immediately adjoining the South Gate itself. This we plotted out into a large rectangle measuring 18 metres east-west and 6 metres north-south. This again was subdivided into three plots 6 metres by 6 metres in size. The middle plot was made to coincide with the axis of the gateway. There is at the South Gate a somewhat steep slope up northward in the direction of the central region of the city which is not so favourable to the investigation of the stratification as a more level surface would have been. But even at the surface it was apparent that the remains were of Semitic date. The pottery that emerged was exclusively Semitic in character, but we were hardly prepared to find that the types that predominated were those already familiar to us from the rock cut chamber tombs (with *divan*) of the North-West Necropolis.

It never occurred to us that these tombs could possibly be contemporary with the last periods of history at Beth-shemesh. Putting it otherwise, we found it difficult to realize that the history of Beth-shemesh could possibly end with a period so early as that indicated by these chamber tombs.

After about a foot to a foot and a half of grey-coloured surface deposit the *débris* of burnt sun-dried bricks began to emerge everywhere, with the strong contrast of its ruddy hue, while here and there were patches of emphatic black, betraying the effect of burning woodwork. We thought at once that here we had, over again, the Red Burnt Stratum of the South Gate. But it was disturbing after a little further work to find a very distinct floor-level coming out, and then the rough stone foundations of walls in sun-dried bricks gradually emerging at a considerably higher level than the floor of the gateway. Indeed, neither the floors nor the foundations showed any regard for the presence of the gateway. It was clear that at the time to which those belonged the gateway no longer existed, but was forgotten and buried out of sight. Looking north at our double section it was now apparent that the one had no systematic connection with the other at all. There was not one Red Burnt Stratum but two, and the siege of Beth-shemesh of which there was such ample evidence in the *débris*

of burnt sun-dried bricks encumbering the gateway, was followed by a *second* burning of the city at a later time when there was no longer any South Gate at Beth-shemesh, and no city walls to keep the enemy at bay.

The twofold character of the stratification will be best illustrated by means of the view looking north shown in Plate XV. In the lower middle of the picture appears the interval formed by the gateway. This is borne out by our section cut across the débris of burnt sun-dried bricks filling up the gateway (Plate II). Some careful clearing with the knife succeeded in bringing the outlines of the fallen bricks into view in the section, but it has to be remembered that before we made our cutting the whole gateway was similarly blocked with the fallen bricks.

Glancing now more into the background of Plate XV we shall observe a second section, of our making, going right across the picture from end to end just in front of where our men are working. This second cutting is not so extensive as the other, but it has the same accumulation of burnt sun-dried bricks. Some of these, to left in the picture, have been brought more clearly into view by means of the knife. At the bottom of this section, in the same left part of the picture, appears a horizontal cut across in deep shadow. The underside of this is, however, in light and reveals to us a very well preserved clay floor extending eastward in the direction of the interval formed by the gateway. But it has to be noticed that it takes no account of this and its filling of débris. It is a floor at a much higher level than the floor of the gateway, and all that is above it is accordingly of later date. Such a floor, if well preserved, entirely separates in time what is above it from what is buried underneath, and thus forms an absolute dividing line in history.

Not only, however, did this floor take no account of the underlying débris, but stone-foundations to house-walls in sun-dried bricks came into view in the middle of the trench in a position which showed clearly that, when they were laid, the gateway was already entirely covered up and forgotten. The base courses in question appear in the centre of the picture, surmounting the débris of burnt sun-dried bricks which our cutting, more towards the front, shows encumbering the gateway.

The meaning then of all this is that the South Gate had gone out of use when the later walls at a higher level, which ignore its presence, were built.

But what about the Fortification Walls to right and left? It was startling to find that these were equally ignored, for the common house walls went right over them. It seemed, indeed, as if we should have to come to the

conclusion that the new city of Beth-shemesh had no fortification works at all.

There is, however, one datum of chronological importance in the evidence which must not be left out of account here. The pottery that occurred above the floor, already referred to, was found to correspond exactly with that of the chamber tombs in the North-West Necropolis. The people who were laid to rest in those tombs were of the same race as those who had built the Third City of Beth-shemesh.

But who were they? Unless we are to assume an entire change of population we have to conclude that they were the same inhabitants of Beth-shemesh who stood the siege of the earlier walled city, indicated by the débris of burnt sun-dried bricks encumbering the South Gate.

We see, then, that the history of Beth-shemesh, as represented to us in the Red Burnt Strata of the South Gate Area, was one of fiery vicissitudes. The city was burnt to the ground at least twice over: once when the city walls were destroyed and the gateway was filled up with débris and then forgotten, and a second time at a period when apparently Beth-Shemesh had no city walls but was an unfenced city of Judah.*

For the moment our interpretation of the data has to be more or less hypothetical because the South Gateway has not any stratification representative of the earlier periods of the city. As long as the gateway continued in use it had to be left open for traffic, and no considerable accumulation of débris could take place there. What we have is a quite sudden submergence of the gateway as the result of a successful siege referable to the very last moment of its existence. All that went before is a blank except the gateway itself. That is a remote landmark in the history of Beth-shemesh and we have already given reasons for regarding the South Gate as an original and intrinsic part of the Fortification Walls and therefore referable to the first great period in the city's history.

The indication afforded by the Red Burnt Stratum filling up the entrance is that the gateway continued in use throughout the earlier and later periods in the city's history as long as Beth-shemesh had any city walls.

* Prof. Alt of Greifswald has pointed out to me that this interpretation of the data agrees excellently with 2 Chronicles xi, 1-10, where in a list of *fenced* cities in the very neighbourhood of Beth-shemesh, Beth-shemesh itself is omitted.

But, as we have also seen, Beth-shemesh itself did not cease to exist when it was deprived of its fortifications. There is, as we have pointed out, a second Red Burnt Stratum overlying that which encumbers the entrance of the South Gate, and this Later Burnt Stratum itself represents the later period in history when Beth-shemesh was an unwallled city.

The lacuna in history, as represented by the stratification of the South Gate Area, refers back, as we have suggested, to a period earlier than either of the Burnt Strata. But the lacuna was gradually filled out with data from different regions of the site. We could already infer that if the upper Red Burnt Stratum, above the South Gate, had deposits that were identical with those of the chamber tombs of the North-West Necropolis, the Red Burnt Stratum encumbering the South Gate would be found to have deposits earlier in date than those tombs. This turned out to be the case. But the new knowledge came to us not in the Area of the South Gate but in the central region of the city which we have called the Central City Area.

The stratification in the Area of the South Gate turned out to be so interesting to many visitors to Beth-shemesh that we purposely kept it in view as long as possible for their benefit in the exact condition in which it appears in the view (Plate XV).

These visitors could see and will bear in mind that the blank in history referred to above is represented by a mere line which may be imagined as drawn along the lowest level of the Red Burnt Stratum which stands for the final moment of the walled city and the floor of the gateway which illustrates the beginning of that.

This mere line now would be represented in the interior regions of the city by a broad band of deposit gradually accumulated in the course of the ages that had passed before that final moment. There is no trace of all this in the South Gate itself, while in the city it stands for a long period in history.

If now at this point we remember that the Red Burnt Stratum filling the South Gate was surmounted by a second stratum of the same kind a few paces within we shall expect a similar relation of things all over the interior regions of the city. And this we actually found to be the case in our excavations in the Central City Area. There a Red Burnt Stratum near the surface had beneath it another, which was evidently the one we were in search of as corresponding to the burnt débris of sun-dried bricks encumbering the South Gate.

At this point it will be important to fix in our minds the fact that this earlier Red Burnt Stratum represents the Middle or Second Period at Beth-shemesh. That is to say, the South Gate, built long before, still existed and was in use in this Second Period and went out of use at the end of it. It is thus also the First Period of Beth-shemesh and the earlier parts of the Second that are not represented by any débris or stratification in the entrance of the South Gate.

If now we put all this into terms of local history, it will help us at the beginning to remember that it was in the middle strata we invariably found the painted Philistine pottery turn up in our excavations in the Central City Area. It also, as we have seen, was found to turn up at a corresponding level and in the same connection in the new trench in the Byzantine Area, though here under less favourable conditions, owing to the extensive disturbance, especially to the later deposits next the Byzantine foundations and floors.

In terms of an archæological equation this then would evidently mean that the second great period in the history of the South Gate was one of Philistine influence if not of domination at Beth-shemesh.

To understand the sequence of events one has to accustom one's mind to be startled at the bare possibility of such pottery in the later stratum. We have to consider that it could not have been there because the use of paint went out with Philistine influence, which ceased at the very moment when the South Gate and city walls of Beth-shemesh were destroyed.

It is apparent then that we are making for the conclusion that the Philistines were dominant, if not in military occupation of Beth-shemesh, in the era of the Second City, and that they were not so in that of the Third. This change of influence, if not of domination, was that of Israel.

It now looks as if we could venture to say with a certain amount of probability who were the besiegers of the Second City. And if, as we think, they were of the race of Israel, then it was they who demolished the South Gate and the fortification walls of Beth-shemesh and devastated the city with fire and sword. At first sight it would almost look as if all this work of dire destruction must have been carried out at a time of religious fervour when it was sought to destroy Canaan root and branch. And yet the very fact that the fortification walls were, apparently, never rebuilt, would seem to point to terms of peace with the native population which left them in possession on condition they did not fortify their city.

But the penetrative force of a new culture, though it often begins in military conquest, does not necessarily mean a military occupation. And there could not have been any real military occupation of a Beth-shemesh without fortification walls. The siege was ruthless in the thoroughness with which the city was set on fire and its walls levelled to the ground; and yet we see a third city arise without any works of defence, but with every appearance of the old prosperity under new conditions and new influences.

The altered conditions of culture come out very clearly in the chamber tombs of the North-West Necropolis. The type of these can hardly be explained except in the light of influences that were now penetrating into the lowlands from the tableland of Judah. The divan arrangement characteristic of these tombs is best explained as immediately derivative thence, and so wide and influential is its use among wandering Israel that we find it in regions as far afield to the south as the confines of Edom at a period probably long anterior to its advent in Judah.

In both sources, the originative south and the derivative north, the divan arrangement of the tomb had so long a tradition as at last to become a meaningless form. At Petra, to take the classical example of the wonderful Khasneh Mausoleum, this meaningless type of divan is seen surviving into Imperial Roman times. And it can hardly be a coincidence, out of all relation to remoter origins and the real provenance of the type, that the same sort of misunderstood divan should be found persistently surviving in Jerusalem itself into the late era of the so-called Tombs of the Kings. These tombs thus preserve to us a tradition in relation to origins which, at a greater remove, is in its way as genuine as if they were really the sepulchres of Hebrew Kings. At the same time the Royal Sepulchres of Jerusalem, if they were found, might be seen to have internal arrangements, including the divan in its more originative form, which would probably come much closer to the type of such chamber-tombs as those of the North-West Necropolis at Beth-shemesh.

By this suggestion it might seem that we thought the evidence went to show not only that these tombs stand in a derivative relation to the sepulchral ritual of Israel, but that they are actually contemporary with the era of the Hebrew Monarchy. This would be my own view.

Not only so, however, but I should go so far as to suggest that these tombs were closed for the last time about the period when Hezekiah was king at Jerusalem.

We have already on the data to hand (such as the pottery) ventured to

co-ordinate the era of these tombs with the period represented in the Second Red Burnt Stratum in the area within and above the South Gate. In other words, to put the matter in chronological terms, they are tombs of the Third City and of the Third Period of Beth-shemesh. They are the tombs of people who lived when Beth-shemesh was an unfenced city of Judah and had no longer any South Gate or any Fortification Walls.

Beth-shemesh was once more invaded, though, as we have seen, with no possibility now of siege like that which was undergone by the Second City. And if we were to search for a contingency that might fit in with the evidence on the spot, and at the time of Hezekiah, it would be that Beth-shemesh was destroyed with fire and sword by Sennacherib and the Assyrian host on their way to Lachish.

But the most grievous moment in an ancient city's history comes sometimes after the tragedy of her destruction with the sad return to her ruins and her desecrated hearths. Beth-shemesh would never awaken again to any real life of ancient cities and yet there was this return. The miserable signs of it emerged late in the course of our new campaign this year in the central regions of the city—toilsome attempts to deepen the defiled well of the city, to lay a lane or two of narrow cobbled street alongside of a deserted sanctuary never repaired ; to set up huts of squatters here and there where the well was not far ; to bury their dead in caves and hollows of the rock where once the North-West Necropolis had been. And so comes death at last.

EXCAVATIONS IN THE CENTRAL CITY AREA.

The excavations in the Central City Area of Beth-shemesh* had for their object the exploration of a typical central region of the city which would reveal the stratification in its natural sequence and unencumbered with any later remains.

The region chosen for this purpose was in a line due north from the South Gate just at the point on the top of the tell where the slope of the surface begins to fall northward. A great rectangular trench was set out 20 metres east-west by 10 metres north-south, the length east-west being subdivided into four trenches, each of them 5 metres wide. The earth-shoot was

* See Plate II.

arranged to be on the north side so as to have the advantage of the slight incline down in this direction.

Fig. 7 is a view of these excavations in progress looking north.* The level represented as reached in the trench is that of the Middle Stratum where Philistine pottery has begun to emerge beneath floors of houses of the Third or Israelite Period at Beth-shemesh. Some of the men are already standing with their feet at the level of floors of houses of the Second Period. One man to the left, in the background at the north edge of the trench, is



FIG. 7.—VIEW OF EXCAVATIONS.

standing on a stone which belonged to the foundation of a burnt house in sun-dried bricks of the Third Period.

These stone-foundations to houses in sun-dried bricks are characteristic and turn up at every level and every period represented at Beth-shemesh. It is very rarely indeed that one comes upon traces of the sun-dried brickwork itself in position.

One such case did, however, occur in this very trench and it was of a house of the Third or Israelite Period. The construction in question is shown

* The visitors present are Prof. Alfred Jeremias of Leipzig and friends.

in Fig. 8 looking south. Three and part of a fourth course of burnt sun-dried bricks are in their place forming the south-west angle of a room of the house in question. One of the bricks that could be conveniently measured was interesting as showing a cubit length of $20\frac{1}{8}$ inches (51.2 centimetres) with a width which was three-fourths of a cubit and a thickness of one-fourth of the same.

The house turned out to have great stratigraphical importance because beneath its floors were found the most important deposits of painted Philistine pottery that had yet turned up at Beth-shemesh. These were the fragments

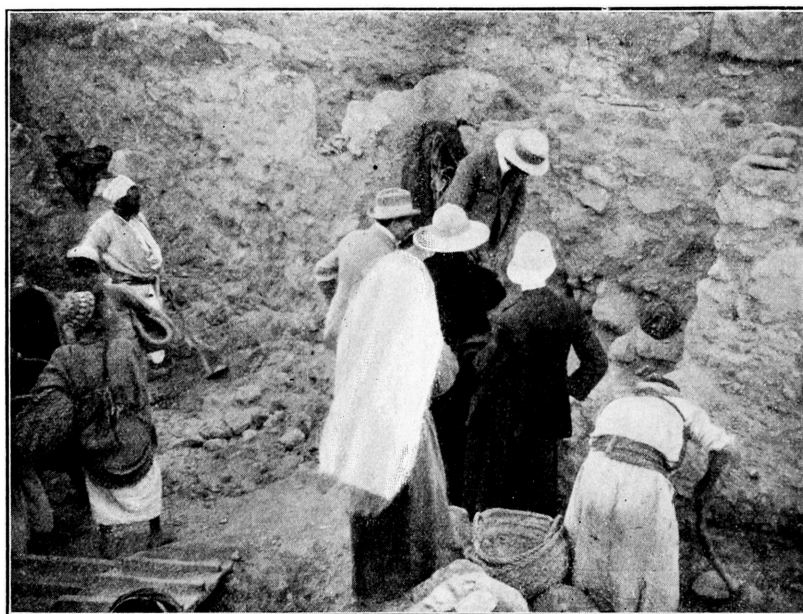


FIG. 8.—EXCAVATIONS IN CENTRAL CITY AREA.

of two vases grouped together in the picture of Fig. 8. The conditions of finding made it quite clear that the vases, after having got crushed or smashed, with parts separated from their connections altogether, were covered up and forgotten before the later house-floor above them was laid.*

In the whole trench excavated in the Central City Area the wall in sun-

* All the persons in the picture are standing in the deposits of the Philistine Period with the excavators. The visitors are being shown the spot beneath the house-floor of the Third Period where the Philistine pottery was found.

dried brick referred to was the only one that could be made out with some of the brickwork in position. The highest layer of bricks was only 5 to 10 inches below the surface. This is remarkable considering that the tell has apparently been continuously under cultivation for centuries.

The underlying Second or Middle Stratum in which the Philistine pottery occurred showed the débris of sun-dried bricks everywhere but, as far as could be seen, no brickwork in position. What did emerge in position were the rough stonework foundations to houses of sun-dried bricks which themselves had vanished.

Where we see such stonework consisting of one or two rough rubble courses we must not assume that these were houses with walls entirely in stone. The superimposed brick construction is simply no longer there. The explanation of this is that new walls could not be founded on old crude brick, which would rapidly disintegrate, and the only part that could, on occasion, be used again with advantage was the underlying stonework of the foundations. The levelling away of the brickwork also serves to scatter the pottery about, and separate fragments from their true context. This was probably the reason why no amount of further careful searching enabled us to find the missing fragments of the two Philistine vases referred to above. The salvation of floor deposits is that they should get buried away out of sight at once and a new floor be laid over them at a higher level without any preliminary process of levelling away.

We did not, however, give up all hope of finding further fragments of the two Philistine vases until we saw that we were getting down into earlier deposits. The level at which the Philistine vases occurred beneath the floors of the Third Period house was a little over 6 feet from the surface. Further sherds occurred at the same level in other parts of the trench, but none belonging to the two vases. One of the two vases has been referred to as being of the same type as the cremation kraters that, in the Ægean, would begin to turn up towards the very end of the Mycenæan Age with the advent of the "metope" style of decoration.* Rim fragments of the same type of vase began to appear in sufficient numbers to seem significant, especially as none would fit each other or the krater-fragments already found. From the area excavated I have calculated that a vase of this type must almost have been present in every house. One is inclined to ask whether they were valued for

* See Plate XVI.

the strange exotic character of their spiral or panel decoration, or whether they originally came to Beth-shemesh filled with rare products from Askalon and Gaza that were once a speciality of the Ægean and Crete. The pleasure in the strange foreign decoration of the vases may thus have been not of a purely æsthetic character but rather like our own affection for the quaint ginger-pots of China.

The Philistine sherds were uniformly so apt to turn up at a level varying between 6 and 7 feet that we began to expect them everywhere once this depth was reached. One such fragment that came out at this depth ($6\frac{1}{2}$ feet) behind the house with the sun-dried bricks on the south side was of exceptional interest. It consisted of the upper part including some of the shoulder of a painted stirrup vase with decoration in matt black and red. The lustreless decoration and the character of the clay show at once that the vase was not an importation from the Ægean world but a native product of the country though not of Beth-shemesh. The vase has on the top of the false neck a cross moline, which is characteristic in the same position in the case of Cretan stirrup-vases that come down into the Third Late Minoan Period. The handles of the vase are ribbed with horizontal bands in matt black alternating with matt red, all on a buff clay slip on terracotta red clay of very friable un-Ægean character, with white limestone particles in it. It was probably wheel-made, though this cannot be made out clearly from the part preserved.

Imported stirrup-vases have been found at other excavations in Palestine, but the very type of the vase is so eccentric in its foreign character that one hardly expects a mere imitation of them. It is more likely that they penetrated to Beth-shemesh filled with some product of the Philistine cities that had originally been a foreign monopoly of the Ægean or Crete. The matt decoration in red and black puts the vase into the same context as the Philistine fragments that have been turning up in the same stratum. It never got so far apparently as to be copied at Beth-shemesh itself. That, indeed, would have been a *tour-de-force* of the native potter. He probably would have been laughed at for making a bungle of so quaint a shape.

It is different with the "krater" type, with its open bowl-like appearance, and its handle on either side. This latter shape was imitated on the spot in the guise of entirely native ware with no decoration, or at most only with a brand or two on the shoulder. The undecorated variety often shows the two handles dwindling until they become mere excrescences on the point of vanishing entirely.

At the east end of the trench in the Central City Area a greater depth had been reached than further west on account of the greater accumulation of house foundations that interfered with complete excavation. It was noticeable that at this greater depth the painted sherds no longer appeared. The Middle Stratum in which the painted Philistine pottery occurred was discernible here in section, and the section on the south side showed a succession of stamped clay floors going down from a depth of $8\frac{1}{2}$ feet to $10\frac{1}{2}$ feet below the surface. These alternate with layers of dark earth impregnated with wood ashes that appear burnt black. The pale layers evidently represent the clay floor as it was laid, the dark bands may be a gradual accumulation on the surface of the floor referable to the time when this was in use. Otherwise we should have to think of the numerous bands of black burnt strata as indicative of frequent catastrophes following each other in quick succession.

Below the earliest of these floors the painted Philistine pottery does not occur. Thus it may be concluded that the strata lying between the earliest of these floors and the rock are representative of an earlier Canaanite period when the Philistines were not as yet in the land.

Meantime, evidence of an important character had been accumulating that wherever an occasional Cypriote or Ægean sherd occurred in the deposits it was in this earlier stratum, *not in one stratum with the Philistine pottery*. Yet they occurred not next the rock, but somewhat higher up at levels that were from 2 to 3 feet above that. They would thus represent a mature era in this earliest period. The independent dating of this Ægean and Cypriote pottery would accordingly once more afford us justification for making the First Period at Beth-shemesh end about the close of the XVIIIth Dynasty in Egypt, and the era more or less about 1400 B.C.

Once the Central City Area had been exposed in section down to the rock it was possible to say something about the succession of periods at Beth-shemesh.

1. Let us take the pottery in the earliest stratum next the rock going up to a floor-level with partially preserved floor at 3 to $3\frac{1}{2}$ feet above the rock. There could be hardly any doubt about the Semitic character of this as a whole. It might perhaps be more rightly called frankly Canaanite. The ordinary water-jar with rounded base and a vertical handle on either side of the shoulder, such as is shown in Plate XVII, item "13," is genuinely Semitic, if any shape is, and this was present repeatedly in fragments in the earliest débris next the rock ; and the other dominant vase-forms showed complete continuity

with those that occurred in the later stratum above this which contained the painted Philistine pottery. The Ægean and Cypriote imported pottery may have had its own influence on the local potters, such as that of substituting a flat for a rounded base, but usually any attempt to mimic the peculiarities of a foreign style is apt to be laughed at among primitive potters, whether modern or ancient. Besides, the women who use these pots usually prefer the genuine foreign article to the ridiculous local copy, and when they want to be conservative they stick to their native pots and pans as, indeed, they have done throughout history in Palestine.

The water-pot or pitcher, with its rounded base and shoulder-handles, never essentially changed its form at Beth-shemesh from the earliest era to the period of the latest Israelite king. And it is only after some experience that one can distinguish any difference between a pitcher of the Israelite Period, like that found in Tomb 2 of the North-West Necropolis, and the type of jar of the earliest period of which we have characteristic examples in the Grotto Sepulchre of the High Place at Beth-shemesh. The two types are shown for comparison in Plate XVIII. They show complete continuity from first to last and, as if to set a seal on so long a story, it is this kind of jar that in the Israelite Period is distinguished by a stamped handle.

2. As has been indicated already, the second or middle stratum at Ain Shems is that in which occurred the painted Philistine pottery. The deposits measured were at one part $4\frac{1}{2}$ feet thick, and by measuring at different points where earlier and later floors were well marked, it was possible to make out that this was a normal depth for the middle stratum.

It has been noted that the occasional Ægean and Cypriote sherds occurred rather high up in the deposits of the First Period. Similarly it could be made out repeatedly that the painted Philistine sherds emerged well up in the second stratum referred to above. We have thus to assume an interval in time between the vogue of the earlier imported pottery and the later derivative style, manufactured in Palestine itself. This interval of time would bring us to a period lying somewhere between 1300 and 1100 B.C. The close affinities of the panel or metope style of the Philistine pottery with that of Mycenæ of the latest era would fit in with a dating which seems to be indicated by the stratification. This era would be best designated as that of intrusive Philistine influence or perhaps of domination at Beth-shemesh.

3. The third great stratum, that next the surface where there are no later deposits, contained no painted Philistine pottery. The caves were of that

strongly native Semitic stamp so well illustrated for us by the finds from the chamber tombs of the North-West Necropolis. The vase-group from Tomb 2, shown in Plate XXXVII, will give a much better idea of the style of this period than the fragmentary pottery from the site. The water-pitcher was very frequent in this stratum and this specimen, shown in Plate XXXVII, item "17," was found in Tomb 2.

It may afford a clue to the era at which we have arrived with the deposits of this stratum if we bear in mind the fact that in the time of the Hebrew Monarchy this is the type of jar that commonly bore stamped handles. Such handles have occasionally been picked up on the surface and there is hardly any doubt that, although stray specimens, they really belong to their true context in the third stratum. In other words we have a clue here which is to the effect that the Third Period at Beth-shemesh, represented by the third stratum, was contemporary with the Hebrew Monarchy. And we have indications elsewhere that the latter part of this era coincided more or less with the Dual Monarchy.

The trench in the Central City Area, arranged on purpose with stratigraphical considerations in view, laid as much stress as possible on the verification of floor-levels belonging to different periods. The alterations in the colour of the deposits often formed the only clue, but this was sometimes strongly marked. The crumbling debris of burnt or unburnt sun-dried bricks always presented a noticeable contrast to the compact grey or pale earth that usually formed the floors of rooms. Frequently this grey or pale clayey earth appeared in layers as if the floors had been renewed again and again in course of time. This phenomenon appeared very clearly in the sections, especially at parts where one had the contrast of burnt sun-dried bricks tumbled on the floor of a house at the moment of its collapse and ruin.

An instance of this of a very curious character occurred in the north section of the trench, towards the middle. Here a pale plaster floor came into view, and is visible in the section at a depth of 1·80 metres or 6 feet. It belongs to a house of the Third or Israelite Period. The pale coloured floor is apparently composed of pounded limestone stamped hard. It occurs at a corresponding level at different points of the north section of the trench and is observable also on the west side. The part discernible in the north section showed side by side two sun-dried bricks burnt to a deep brown black lying flat a little above the limestone plaster floor. The interval between showed a stratum of black ashes with which were mixed up quantities of carbonized beans.

These were recognized as identical with a kind of Egyptian bean still cultivated in Palestine and possibly originally derived from Egypt.

The beans lay on the floor in a heap as they might have done on having been freshly threshed. This would have been in the time of bean harvest, towards the end of May. And as they lay on the floor they may even have been undergoing the processes of sifting at the hands of the women-folk of the house.*

At this moment we may suppose came the invasion of Israel by Sennacherib and his army and the destruction of Beth-shemesh by fire and sword. The house in which the beans were found shared the common fate. Walls and roof collapsed with the fire, burying the roasting beans beneath them. So they remained until they were found by us. Specimens of them are shown in Fig. 9, item "3." Item "4" shows a selection of the beans sifted by our workmen.

The people of the latest city seem to have had the general habit of laying their floors in limestone plaster, whereas the earlier floors are more commonly in stamped clay or mud of a dull grey colour. The limestone clay floors may thus be said to be a characteristic mark of houses of the Third Period at Beth-shemesh.

Near the north-west angle of the trench an earlier floor of compact mud appeared at a depth of 12 feet 4 inches (3·75 metres) from the surface. The floor of the Third Period at the same point was at a depth of 5 feet (1·50 metres) from the surface. At this same point the virgin rock was found to occur at a depth of 18 feet (5·50 metres) from the surface. The three general strata are accordingly marked with exceptional clearness just where the north-west angle of the trench occurs.

Those more particularly interested in the stratification of Beth-shemesh will find this indicated in its general aspects in the Plans and Sections made by Mr. F. S. Newton who put down the data, so far as discernible, in different conventional colours on the spot. Here yellow was made to indicate deposits of the earliest or First Beth-shemesh Period, blue stood for contractions and débris of the Second Period and second stratum, while red was made to stand for the deposits and walls of the Third or Israelite Period at Beth-shemesh.†

* The sifting cannot have been completed when the catastrophe came, for the heap of beans showed impurities from the threshing-floor which had got carbonized in the conflagration with the beans themselves. This comes out very clearly in Fig. 9, item "3."

† So in the original drawing, which may be seen at the P.E.F. office; but in the printed plan the distinctions are made by varied shading.—ED.

The orientation of the house walls, as shown on the Plan, has an interest of its own. This does not fit in with the east-west, north-south orientation of the site as indicated on the General Plan, but is considerably more west-north-west, east-south-east, if one takes the lines of wall that are most

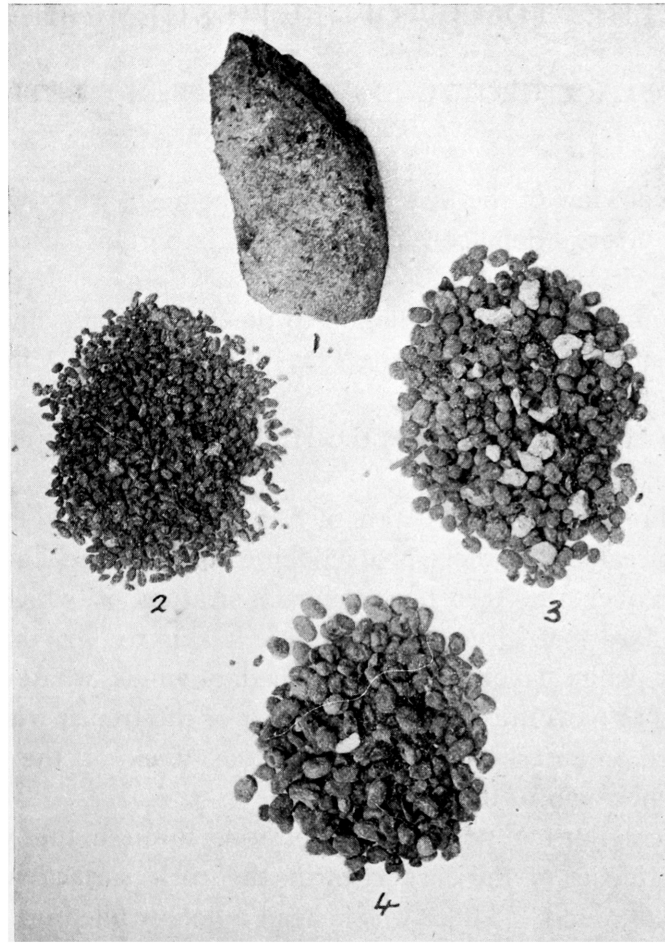


FIG. 9.

prominent. In a southern climate this orientation probably had some advantage of its own, and the matter of frontage in relation to possibilities of light and shadow were not matters that were left out of account by primitive and ancient peoples. Similar orientations are said to have been evident in several excavations in Babylonia.

PALESTINE EXPLORATION FUND.

THE TOMBS OF BETH-SHEMESH.

THE HIGH PLACE GROTTO SEPULCHRE (FIRST BETH-SHEMESH PERIOD).

FROM the point of view of the history of Beth-shemesh, what we have called the High Place Grotto Sepulchre is the most important discovery we have made within the city walls.

The position of the tomb in relation to the High Place and its environment will be best understood from the Plan of the Central City Area shown in Plate II.

The grotto immediately adjoins the High Place on the east side but a little in the direction of south-east.

In this whole area, at a depth of 3.50 metres ($11\frac{1}{2}$ feet) from the surface, it is noticeable that there is a sudden change in the character of the débris, and all over the trench a compact stratum of white limestone is encountered so hard that it required energetic labour to get through it with the pick. This white layer, which contained no finds whatever, was some 45 centimetres ($1\frac{1}{2}$ feet) thick towards the part of the trench where the grotto occurs and rested on a dark stratum about 1 foot thick of the usual earliest débris which went down to the rock.

Then suddenly, at one point, on penetrating through the white stratum and some 8 or 9 inches of the darker earth, the rock surface was no longer found as it was all round. There was instead a hollow filled up with the dark débris. Fragments of Cypriote pottery of the somewhat earlier date (before 1400 B.C.) which is associated with the cemetery of Hagia Paraskevi near Nikosia, including the sherd of a characteristic-painted bowl with wish-bone handle, turned up alongside to afford an indication of our bearings. On having cleared the rock surface all round, it was at length evident from the interruption in this that we were at the mouth of an underground cave. The rock surface at the top of the hollow interval was at a depth of nearly 15 feet (4.50 metres) from the surface.

The débris that encumbered the mouth of the cave was of the same character as that outside above the rock. It was full of fragments of pottery, the general *facies* of which was the same as that next the rock all round. This débris got looser and finer in consistency as we got down into the cave, and it had at last a brown colour as of ground coffee or snuff. With it were mixed up fragments and particles of limestone that had apparently got detached from the roof of the cave in course of time.

When we got down to the interior rock surface we could, by crouching, look into the cave and see that the silt in this did not rise to the ceiling, and on accustoming ourselves to the darkness within we could see the sides or tops of vases in position on the floor of the cave. This itself gave an indication of the depth of the accumulation of silt. The cave at the entrance was very shallow, the roof being at parts only 2 or 3 feet above the natural floor. This roof, of irregular height, presented, so far as we could see for the moment, a perfectly unwrought surface.

The appearance of the natural opening as looked at from above can be best realized from the plan of the grotto indicating this (Plate XI). On the north side from which we had begun to penetrate down into the interval in the rock there was a short narrow groove and then a sudden drop to the floor of the cave.

The pottery in this entrance part, where there was no protecting roof, was in a fragmentary condition, being crushed through pressure from above. Every fragment that was noticed was kept in its context, and it is possible that some of the vessels indicated can be reconstructed. Noticeable among the sherds were fragments of a water pitcher of that two-handled type which at Beth-shemesh is seen surviving through all periods of its history. It is essentially the same type as that which in the Israelite period bears the stamped handles that are of such singular importance, especially to the Hebrew epigraphist. It is characteristic that at the early period to which we have to assign the cave, these jars, as well as the other types indicated by the fragments, were wheel-made.

Along with the fragments of the jar, occurred a small elongated piriform juglet with conical base which was also wheel-made and had a slightly pinched spout. The vase was of bright terracotta red clay covered by a fine pale buff clay slip.

In the interior the grotto was seen, on the right hand or west side, to be closed by means of two large limestone boulders lying in a north-south

direction. The one to the south was removed and several vases in position were seen behind it. These all lay more or less in a group standing or on their sides, according as they were of the jar or of the bowl or saucer type. They were only partially covered with the brown powdery earth referred to above.

The cave, as can be seen from the Plan, extended also to the left-hand or east side.

THE POTTERY OF THE HIGH PLACE GROTTO SEPULCHRE.

A typical group of vases from the High Place Grotto Sepulchre appears on Plate XVII. A glance at this will show that the characteristic lamp with rounded base of Tomb 1 in the North-West Necropolis is conspicuous by its absence.* The significance of this is that the type of lamp in question had not as yet appeared at the period to which the tomb belongs. It is hardly likely that its absence is accidental since between whole and fragmentary specimens the tomb yielded over forty vases of different kinds.† The sepulchre should thus be considered at least older than Tomb 1.

There was again no imported Cypriote or Ægean pottery, though considering the comparative rarity of such imports the absence of such foreign wares may very well be accidental. It has to be noted, however, that in the East Grotto and its entrance the imported wares, especially Cypriote of XVIIIth Dynasty date, occur apparently in one context with what may be a somewhat earlier type of these lamps. This once more ought to mean that our sepulchre is earlier on the whole than the East Grotto, and this earlier character may be borne out by the fact that, as has been already mentioned, sherds of imported Cypriote pottery were found in the somewhat later débris outside and above the grotto.

The indications would seem, then, to be that our tomb should be assigned to a period, at any rate, anterior to the era of the XVIIIth Dynasty in Egypt.

* See below, Plate XXV.

† Our vases belong to the same general context as the important group shown in *The Excavation of Gezer*, Plates XXXVIII, XXXIX, XL, XLI. There a type of shallow lamp with small pinched wide spout occurs which is clearly earlier than those of our Tomb 1. Examples are XXXVIII, item "10"; XXXIX, "2"; XLI, "13," "14," "15."

Of types present in the tomb it will be convenient to begin with the juglet. This occurs exclusively in its earlier piriform shape, pointed or almost pointed below. Of the specimens shown, item "14" was found, together with the fragments of a small pitcher of the same type as item "13," in the débris filling up the entrance to the tomb. The vase is clearly wheel-made and has a pale buff clay slip, which was originally hand-polished, on friable buff clay. The hand-polishing was carried out in the up and down direction, and there are traces of the rills caused by the polishing implement. The base has a slight flattening at the point and the lip is somewhat pinched opposite the handle to form the rudiments of a spout. The juglet (item "3") from the tomb itself is closely analogous, but of larger size. It has traces of a smooth buff clay slip on friable buff clay. The neck is broken, but it projects somewhat in front in such a way as to indicate that it had the lip pinched in the same way as item "14."

The slightly variant type shown in item "12" is much more characteristic of the tomb. It also is wheel-made, but it has a much finer slip than the other. This is of a purple-brown hue with a metallic sheen in the lustre, which may come from an admixture of hæmatite in the slip pigment, and there are once more traces of the polishing implement in an up-down direction. The handle is partly broken off and the neck fractured, but it is probable the vase had the same pinch out of the rim as the other specimens.

Item "1," which is much incrustated, has its surface almost entirely gone, but it has some traces of a ruddy brown lustrous clay slip on very friable buff clay. The neck is fractured, but the lip was pinched to form a spout. The pointed base has crumbled away so as to leave a hole.

The two much smaller juglets (items "5" and "7") belong, properly speaking, to a variant series. They show such delicacy and refinement as almost to seem *articles de luxe*. The larger type was used for decanting or ladling out wine and oil from larger jar vessels.* The very refined small types could hardly be put to such common uses. Of the two, vase "5" had its slip almost entirely gone, but it could be seen to have had a lustrous ruddy brown slip on friable buff clay. It has a minute button base. The neck and handle are gone.

* The juglet, item "1," was actually found in the mouth of the jar which was companion to jar item "13." It is interesting to note that in the latest Re-occupation Period of Beth-shemesh the juglet still performs its function of ladling out of oil jars as shown on Plate XIX.

The companion to this vase (item "7") had its warm buff clay of so friable a character that half the vase had crumbled away. The whole had been covered with a ruddy brown highly polished clay slip of quite exceptional lustre and refinement. Besides half of the vase the neck and handle were also gone.

The elegant piriform shape characteristic of all these juglets is equally apparent in the vases of larger size with the same type of base. The water pitcher, "13," is a perfect example of this. It and a companion, with a fragment out of the lip, were found in the west division of the grotto in the position indicated on the Plan. They are the two finest vases of this type that have been found at Beth-shemesh, and their elegance of form is all the more remarkable when we remember that they are also the earliest. The similar type of a much later era has not nearly so fine a shape; the handles project more, and the feeling for form has become conventionalized into a mere potter's tradition. A typical vase of this later era (Third Beth-shemesh Period) is the one from Tomb 2 of the North-West Necropolis, shown on Plate XXXVII, item "17." Our jar has a smoothed buff clay slip or clay surface on somewhat friable buff clay and, like all the others mentioned, is wheel-made. To left of one of the two handles is a large cross mark which was made with some implement, or with the thumb nail while the clay was wet.

In contrast to the fine sense of form shown by the jars and juglets referred to is the clumsy shape of the jug (item "2"). It had one handle and a sharp turn-out rim which was chipped away opposite the handle. On the outside it had a warm buff clay surface slip on very friable ruddy buff clay.* It contained fragments of a skull and other bones of a child, and these were probably put away into it when room had to be made for some later burial. This seems also borne out by the fact that there was found inside it the fragment of a bowl resembling item "4." This custom of putting the bones into vases on the occasion of later burials survived apparently throughout history at Beth-shemesh, as is illustrated again and again in the case of the chamber tombs of the North-West Necropolis.

The jug decanter (item "6") was the only one of this type observed in the cave. It had one handle and a narrow neck, both broken off. The vase has a fine buff clay slip on friable buff clay of somewhat warmer tint than usual

* For a similar vase, which presents the type in an earlier form and in similar company, see *The Excavation of Gezer*, II, p. 160, Fig. 321.

and is wheel-made. It was almost filled up with powdery brown earth, which ran out like sand when the vase was inverted.

The bowl and basin types found in the grotto belong to two different series, illustrated respectively by items "4," "8," and items "9," "10," "11."

Of the two bowls ("4" and "8") the lower shape of item "8" is seen at once to be much the finer of the two. This had a buff clay slip covering the whole surface, inside and out, on finely levigated buff or pale terracotta clay. On the rim was a wash in some ruddy brown pigment, polished by hand to a highly lustrous surface like that of the small juglet (item "7"). The vase was wheel-made but this was smoothed away as much as possible. This was quite in contrast with the habit of a much later time which rather made a point of emphasizing the rills made by the rapid rotation of the wheel.

Vase "4" was of the same type as the other, but of higher, less elegant shape. It had a pale buff, hand-polished clay slip on the outside on pale buff clay. This went in over the rim as far as the widest part of the body of the vase. All over these parts the wheel-marks were smoothed away, but were very distinctly discernible on the inside all over the bottom of the vase not covered by the slip.

The larger basin-like type of saucer was characteristic of the tomb and recurred again and again. It was evidently a favourite vessel used in this First Beth-shemesh Period, to which the tomb belongs. It survives in various transformations throughout the history of Beth-shemesh but it is never again quite so frequent as in this first period and it never again shows the same large refinement of form.

The saucer (item "9") had a fine buff clay slip on the interior which showed traces of hand-polishing radiating out from the centre. Over this on the rim and extending inside was a broad band of highly polished red pigment like that covering the outside of the juglet (item "7"). The vase was wheel-made. The buff clay was so friable that a large part of the outer surface, including the projecting base, had scaled away. It contained the remains of a skull.

The saucer-basin, item "11," resembled saucer, item "9," with the same finely smoothed clay slip on similar friable clay, but there is no trace of any hand-polished red band on the rim. Like the other, this has the interior carefully smoothed away, but the less visible outside shows the wheel-make in both cases. The projecting ring base and part of the outside are much scaled away. This vase, like the other, had the remains of a skull in it.

The fragments were very thin and the skull was apparently that of an infant. The skull was covered with the brown powdery earth strewn over the whole cave, but beneath this in the vase was earth of a tougher consistency and ashy grey in colour.

Vase item "10," was more of a basin than a saucer or bowl. It had a curving rim projecting slightly outward and sharply inward. The whole body of the vase, inside and out, was covered with a fine buff clay slip on buff clay which was less friable than usual. On the rim was a band in the usual lustrous red pigment. In the interior was a large cross decoration in the same red-brown lustrous paint. This is brushed on with a free sweep of the hand, and there is not the same certain indication of hand-polishing to account for the lustre as in the other cases. The vase was found in two large fragments which had got strayed from each other, and other fragments were missing. In the vase, which had showed marks of the wheel inside and out, was found a heavy mass of white substance resembling lime but with a penetrating sour odour suggesting some organic matter. Some bones gathered together, and apparently put purposely where they occurred, were found underneath the vase, which was tilted up somewhat as if meant to cover the bones.

THE POTTERY OF THE EAST GROTTA (FIRST BETH-SHEMESH PERIOD).

We have suggested that the East Grotto "finds" are, as a whole, somewhat later than those of the High Place Grotto Sepulchre though still belonging, for the greater part at least, to the First Beth-shemesh Period and the era which closes with the XVIIIth Dynasty in Egypt. Indications of later date are furnished by the presence here of imported Cypriote pottery of the Tell-el-Amarna period and its absence from the other. The lamp, so conspicuous by its absence in the High Place Grotto, is here frequent. It would seem, from the type of these indeed, as if the East Grotto ceased to be used for burial purposes, just as Tomb 1 of the North-West Necropolis was inaugurated as a sepulchre.

A lamp of the large type without flattened base is the first item shown on Plate XX. It has traces of a smoothed buff clay slip on warmer buff clay with many white limestone particles in it. It has prominent marks of the

wheel-make, especially on the inside, and the rim has a decided turn-out in the manner more usual in a somewhat later time. In the Second Period at Beth-shemesh to which belongs Tomb 1 this turn-out of the rim becomes more and more marked as time goes on. The "pinch-in" of the wick-spout is already emphatic. This part, as is usual with these lamps, shows the blackened surface left by the burning wick. There is a slight chip of the rim on the right-hand side of the wick-spout.

The lamp shown (item "5") is of the same character but of smaller size and less depth, less "pinch-in" of the wick-spout with mark of the potter's forefinger and thumb on either side. The rim is profiled inward with a tendency at the edge to sharpen in a manner that recalls a characteristic of some of the saucers of the High Place Grotto.

The pedestalled bowl (item "3") is of exceptional interest. The type with pedestal did not occur in the High Place Grotto but the large bowls with red cross inside have a similar contour with variant profiling of the lip. There is no doubt that this type of vase has a ritual significance, and that it is indeed the prototype, in the First Beth-shemesh Period, of the libation chalices that play so important a role afterwards in the era of Tomb 1. In the Second Beth-shemesh Period the bowl tends to become smaller, preserving its curved outlines, but at length assuming the angular metallic contour which we see exemplified in Plate XXII, item "10." In Plate XXI the earlier and later types are shown side by side.

Our item "3" was set up out of fragments so that only one or two small blanks occur in the bowl but the pedestalled foot is broken away below, and the missing fragments could not be found. The chalice has a buff clay surface or slip on warmer buff clay with the usual white limestone particles in it. The wheel and brush marks are discernible inside and out.

The two vases with rounded bases and suspension handles (items "2" and "4") might be regarded as belonging to the very earliest elements in the East Grotto. But it may be significant that the type does not occur in the High Place Grotto, while, on the other hand, one specimen of higher shape emerged in Tomb 1. Item "4," indeed, has a cylindrical shape which seems to have been affected by an alabastron type of vase that in the Ægean Area is seen for the first time towards the end of the Third Late Minoan Period.*

* For similar vases in exactly the same sort of foreign context, see *The Excavation of Gezer*, III, Plate LXV, "24," "34"; Plate LXVI, "53"; all from Tomb 7 at Gezer.

The piriform juglets in this group (items "6," "8," and "14") are a tradition from the earlier period represented by the juglets of the High Place Grotto. They have the same pinch-spout, but more emphasized, and the same pointed base, but they have lost much of the old elegance of shape, and they do not stand the test of comparison when put side by side with those. There is a gain in mere technique which means that the clay is not nearly so friable as in the earlier period, the white limestone particles are still there but the highly lustrous hand-polished surfaces are gone, and the buff clay slip, when it does occur, is not polished to the same degree of lustrous smoothness. The rills of the wheel are also allowed to appear on the outside, while these were carefully smoothed away in the earlier era. Item "14," indeed, still has the piriform point below, but it bulges in a fashion which betrays the fact that juglets of the "baggy" type are already in use, like item "10."

The finest and most interesting vase from the East Grotto is undoubtedly the painted two-handled basin shown (item "7"). This vase has, encircling the upper part, a double system of rectangular panels alternately cross-hatched and blank in a thinly laid matt pigment of a ruddy-brown hue on a pale buff clay slip inside and out on dull terracotta clay. The workmanship suggests its having been partly turned on the wheel and partly built up by hand. The vase has the usual white limestone particles appearing in the clay, but the fabric does not seem to be of Beth-shemesh.

Items "9" and "15" are importations from Cyprus. "9" is the usual leathery, base-ring ware, contemporary with the period of the XVIIIth Dynasty, and "15" the variant in a ruddy smooth clay slip on friable clay, scaled away at parts, which might seem a local imitation. But such local imitations are not usual at the period to which the vases belong, and the matt white decoration appearing through the incrustation is the same in character as that of the other vase.

The alabaster pedestalled chalice (item "11") is a rare Egyptian type of the era of the XVIIIth Dynasty, which appears in suitable foreign company alongside of the Cypriote vases. The pedestalled foot is broken away, but this is characteristic and is hardly ever absent in this type of vase.*

The basin type (item "17") is clearly a derivation from the earlier period

* The chronology of this vase is discussed in *Annual*, No. 1, p. 69. The similar alabaster chalice from Gezer, referred to in the passage cited, is now published in *The Excavation of Gezer*, III, Plate CVI, item "4." The pedestal here is in a separate piece.

of the High Place Grotto, and the family likeness with the basins from there appears on the face of it. The variations are but slight; not so sharp an edge to the turned-in rim, a higher, somewhat less graceful form, a more emphatic ring to the base. There is the same desire to conceal the rills of the wheel, especially on the inside, but the ruddy brown lustrous or lustreless pigment is no longer there, though our group shows that matt red paint decoration was occasionally made use of in this period. There is a thick unpolished buff clay slip on somewhat ruddier friable buff clay, which has scaled away here and there. The basin has been built up from many fragments and only a few chips are missing.

The ewer (item "18") is also a derivative from the earlier era but it suffers in comparison through losing the true piriform shape by being too much bulged at the shoulder. It has an external profiling of the rim which is reminiscent of the earlier manner, but the emphatic pinch in this, to form a spout opposite the handle, is a mark of the later period to which the East Grotto belongs. It has a small flattened base on which, however, the vase cannot be made to stand.

The object item "13" has a humorous interest of its own. It is the right side of what was originally the figurine of a donkey performing the function of a water-carrier. On the side preserved are two water-vessels and the one in front can be seen to be a ewer type with one handle and pinch-spout like the one we have just described but of larger size. The other, behind, is the perpetually recurring water pitcher of the same type as was found already in the Grotto Sepulchre of the High Place* and has survived throughout history at Beth-shemesh until the period of the kings represented by the tombs of the North-West Necropolis.† This vase-model is unfortunately broken away at the top but there is no doubt that it had the same sort of neck. The vase is stoutly bound round the middle with some sort of band which also passes through the handle of the other vase. Another pair of water-vessels has to be assumed on the missing side. The vase-models have each got a hole connecting with the interior of the figure so that the whole comes under the class of libation vases. The sepulchral meaning of the object may be the magical one of assuring water to the soul in the other world. The object has the additional interest that the jar vase-model is painted with bands alternately matt red and black going up the body and

* Plate XVII, item "13."

† Plate XXXVII, item "17."

twice (in red) round the neck. The matt red and black colour pigments are essentially the same as those we find later employed in the decoration of the painted Philistine pottery. The meaning of this would be that it is the decorative style of the Philistine pottery that is foreign, while the matt pigments were not foreign at all, but in use long previously on the spot.

The three vases (items "12," "16," "19") show very strong foreign, apparently Cypriote, influence, but it is hardly probable that they belong to the period of Cypriote imports, and it is more likely that they reflect that influence at a period subsequent to the XVIIIth Dynasty. It is possible they come into the period immediately succeeding this and anterior to the influx of Philistine influence. The vases are wheel-made, which is the very thing the genuine Cypriote ware is not, while the clay, with its white limestone particles, is native and the product of some locality probably not far from Beth-shemesh, if not Beth-shemesh itself.

Vase item "16" has parallel bands in matt red going over the handle, down the shoulder, in sets of threes, while going round the shoulder are two such bands with one in matt white between them. A similar arrangement appears above the base. In the wide field occupying the lower part of the vase, between those two bands, sets of three parallel bands go up and down vertically or obliquely. In the interval between two such sets a wavy band in matt red meanders. The whole is on the hand-polished ground of the buff clay slip on porous buff clay, burnt grey in the section. The wavy line referred to has a long history, and the motive recurs again and again in the Philistine repertory of a later time. The vase is complete except for a chip out of the rim. Vase "12" is somewhat similar in type and style, but instead of the matt white it has matt black. It may be characteristic of the relatively early period to which we would assign these vases, as compared with those of Philistine style proper, that our vase has the matt black subordinate to the red, while in the Philistine repertory it is the red that is subordinate. Vase "12" has two rim bands and two neck bands in matt red, with a band in matt black between them. The body of the vase has sets of three matt red bands with two in matt black, carried down the body of the vase at intervals, and these intervals have similar bands going down zig-zag between the others. The lower part of the handle has a set of four parallel bands in matt red going round it with three bands in matt black between. This decoration is laid on to a lustrous hand-polished buff clay slip on porous buff clay with occasional white

limestone particles in it, like that of the other. The vase has been mended and the rim and part of the neck are wanting.

Vase "19" is much more of an imitation of foreign style than the two already described. Sets of parallel bands in matt black, converging on the shoulder to form a chequer pattern, pass obliquely down the body of the vase to the base. The buff clay surface slip of this vase is much less well preserved than in the case of the other two, and there is no trace now of any hand-polishing there may have been. The handle and part of the rim are broken off.

Of all three vases, that which shows the decoration most distinctly is item "12," but in the case of none of them are the colours so well preserved as to make any impression in a photograph.

THE TOMBS OF BETH-SHEMESH IN THE NORTH-WEST NECROPOLIS.

Our explorations in the North-West Necropolis of Beth-shemesh were carried out under favourable conditions during the harvest season of 1911. A summary account of the discoveries made in the tombs opened at that time appeared in the *Quarterly Statement* for October of the same year. This important cemetery extends all along the north boundaries of the city, the tombs being hewn out of the rocky limestone slope that descends from the city walls to the level of the valley-fields on this side. They are thus almost invariably orientated with their façade entrances facing in the same direction towards the north.

The cemetery extends all along the north boundaries of the limestone spur on which the city stands. Our preliminary explorations led us in the north-west direction as the most promising region for investigation, but our original intention to continue our explorations in the eastward direction the following year was frustrated through the settlement of the whole area during the quiet harvest season by squatters from Deir-Aban.

A strong inducement for starting operations in the more western region was furnished by the existence there of the great natural burial-cave which figures in our Reports as Tomb 1 of the North-Western Necropolis.

The story of how we came to know of this Tomb is an interesting one.

It is well known that for some years past objects from Beth-shemesh have been finding their way into the market. Some of these are now in the Museum

of Toronto, others again adorn the interesting collection of Mr. Herbert Clark at Jerusalem.

My own attention was attracted to this interesting sepulchral grotto by the American Colony at Jerusalem, a member of which community, Mr. John Whiting, came down to Ain Shems on purpose to show me the spot. As this was not in the dead of night, but in the broad light of day, the revelation was by no means in accordance with fellahin ideas of decorum about a matter that was meant to be a dead secret to all except themselves. They accordingly persuaded our foreman of works to the belief that Americans were but strangers in the land, and how should they know about the hidden treasures of Ain Shems better than the fellahin, who were really in the secret. The conspirators accordingly led us away to an entirely different spot nearer the west end of the site. Here they showed us an aperture with shaft into the rock which was rectangular instead of circular, as was that shown us by Mr. Whiting. Anybody would have been misled who had no obvious grounds for suspicion. Indeed, the rectangular shaft looked distinctly more attractive than the other, for one was at once reminded of the rectangular shafts that are a feature of the most early Mastaba tombs of Egypt. This, however, contained nothing but Byzantine pottery.

TOMB I (SECOND BETH-SHEMESH PERIOD).

Tomb I of the North-West Necropolis is in origin a natural grotto opening out north at the foot of the limestone bluffs which, ending westward in a point towards the exit of Wady Bulus, themselves form the extremity of the spur on which Beth-shemesh is built.

The grotto well illustrates a peculiarity of the limestone formation of the whole country about Beth-shemesh. This presents a hard crust next the surface while the formation below is much softer. At a depth which varies locally the limestone rock changes to a loose limestone conglomerate. All this softer material tends to hollow out and, in the case of the conglomerate, to break away in such manner as to form natural grottos like the East Grotto and our Tomb I. The final stage in the process is the collapse of the caves thus formed, as indeed we found to have happened in historic times in the case of the East Grotto.*

* See *Annual*, No. 1, pp. 61-2.

Tomb 1 is a grotto of this kind artificially enlarged and transformed for the purposes of sepulture.

In this way two deep niches were added, one on the south and one on the west side. The natural opening on the north side was walled up and an artificial funnel opening was pierced through the roof. All this appears on the Plan and Sections of the tomb shown on Plate IV. The walling up served the double function of making the tomb more secure from easy access and of helping to give greater strength to the ceiling.

The tomb was completely explored by us in the course of our campaign at Beth-shemesh in 1911. It was left with its funnel open. On my return this autumn I found the funnel closed and the walling at the side removed with a deep cutting made through the thrown-out débris on that side so as to afford a new way of entrance. This was, of course, the original one, and the cave was now being put once more to what may have been its use in primitive times. It had been changed to a troglodyte dwelling.

THE POTTERY OF TOMB 1.

A characteristic group of vases from Tomb 1 is that shown on Plate XXII.*

By comparison with the vases of the chamber tombs it will be seen that there is considerably more variety of type. This means in the first instance that the grotto sepulchre had a much longer history than the rock-cut tombs of Beth-shemesh. The use of the cave for burial began much earlier than was the case with the chamber tombs. Those were family sepulchres which, as usually happens in such cases, remained in use only for a few generations. The cave-tomb referred to being, on the other hand, a common sepulchre, remained in use for many generations.

It can be said of the vases as a whole that they have been made on the wheel. Even the tiny juglets are no exception in this respect. There is very little use of paint except in the form of a pigment slip. This, in the case of bowls or saucers, like those in the top row, usually covers the whole of the inside and comes out over the rim so as to form on it a broad decorative band, usually of warm terracotta red, in contrast with which the parts of the

* Some of these vases along with vases of the East Grotto are illustrated for the sake of comparison in the *Annual*, No. 1, p. 68, Fig. 15.

bowl not covered with the slip appear of a considerably paler hue. The slip is usually given a lustre by means of hand-polishing with some rubbing instrument, possibly of bone or polished stone. The lustre is often almost entirely gone, but it can usually be detected on close examination.

The series grouped in the second row, "6-14," is of exceptional interest. There are several ritual objects in the set and the Astarte of Egyptianized type, with her full bosom, speaks for herself. The libation chalice in the middle, with its tall foot and elegant shape, is the most perfect example of several found in fragments in the tomb. Some of those it was possible to set up and one such is shown in Plate XXI. The shape, especially the rim turned straight out, suggests dependence on a metal type, and it is possible this metal type itself may stand in a derivative relation to a prototype in Egypt. The general form and the foot have a certain analogy with a type of alabaster pyxis-like vase which in Egypt is associated with deposits of the XVIIIth Dynasty. One such alabaster chalice with the foot broken off was found in the East Grotto at Beth-shemesh and is shown in Plate XX, item "11."* Our libation chalice, which like the other vases is wheel-made, has a pale buff clay slip over buff coloured clay.

The native objects grouped on either side of the chalice are, of course, modelled by hand. The figurine itself (item "11") represents a horse, and the head next to it (item "7") has even the mane rendered. Thus the similar fragment to right of the horse has to be interpreted in a similar manner, though the mane is not represented. The heads show the finger prints of the modeller, and the surface, so far as can be seen, is simply smoothed away without the addition of any clay slip.

The figurine of Ashtoreth (item "9"), besides its ritual significance, has its own interest of style and technique. The Egyptian wig and type of face betray the use of a mould for modelling this part. The back of the head is left rough with finger marks which show that the clay was pressed into the mould so as to give a good result. It is likely that these moulds were bought for the purpose, and that they were imports from Egypt if not copied on the spot. The rest of the figure is made by hand in a frankly native style. The clay is ruddy terracotta with white limestone particles in it and there is no discernible trace now of any surface clay slip. The reason of this is that the whole was

* See also *Annual*, No. 1, Fig. 15, item "3" in lowest row, and pp. 69-71. The alabaster chalice from Gezer, referred to here on p. 70, is now published, *The Excavation of Gezer*, III, Plate CVI, "4."

apparently covered with a white stucco-like substance with details put on in paint in a style familiar in Egypt. Almost all of this has disappeared, but distinct traces of it are discernible on the face and elsewhere in the picture of the figurine shown on Plate XXIII.

A very curious object is the model of a throne in terracotta (item "13").* A break is visible in a seat within indicating that there was originally a figure of some divinity represented as sitting on the throne. A second example, found in the same tomb, showed the same characteristics.

There is hardly any doubt that the object has a ritual significance, and the cult of an enthroned divinity may here suggest Philistine affinities that themselves possibly stand in a derivative relation to a similar cult in the Mycenæan world.

There the enthroned dynast who, in his function of priest-king, is earthly representative of canonized ancestors, becomes transformed into the enthroned divinity of early Hellenic temples by an act of apotheosis after the priestly rule of the Mino-Mycenæan dynasties has itself passed away.

This era of transformation was the very time when the panel or metope style of decoration, which has left such a strong mark of influence upon Philistine ceramic art, was coming prominently into view at Mycenæ.

The two fragments shown together as item "8" to the right hand of the Astarte are parts of a figurine representing a dove. This is still more suggestive in its ritual significance and in its possible affinities. The fore part of the body is unfortunately missing but the head with neck and the hind part, including the tail, are there. Much diligent searching for the missing fragments led to no result, but it has to be remembered that the fellahin have been excavating in Tomb 1 for years before we appeared on the scene. The head shows that the beak had a spout for pouring, and it is thus probable that there was a hole for filling the vessel on the missing part of the back. It is thus a ritual libation vessel in the shape of a dove.

The discoloration of the fragments, probably through contact with fumigation fires in the tomb, might lead one to put the vessel down as entirely undecorated. On the contrary the back and tail show parallel bands going lengthwise, alternately matt black and red, in the characteristic manner and technique of Philistine ceramic art. The pupil of the eye is rendered in black, a red band passes down the head towards the beak, and parallel black bands

* Shown in larger size, Plate XXIII.

round the neck with a band in red below. There are also red bands traceable going round the back. The vase shows wheel-make in ruddy buff-brown clay with a smooth red-brown surface. This discovery was a source of great satisfaction. Our new campaign at Beth-shemesh had brought out results in the stratification that made it more probable every day that Tomb 1 would be found to cover a large part of the Middle or Second Period. The influence, however, that appeared strongest was that of Egypt, and there was not much that on the face of it suggested contact with Philistia. The dove-vase puts us right and not only its ritual significance but its decorative style brings us at once into touch with the Philistia of the era about 1200 B.C. It thus also sheds its own ray of light on the chronology of the tomb. The vase in style and probable provenance comes into the same context as the painted bird vase from Gezer shown in *The Excavation of Gezer*, II, p. 237, Fig. 389.

The ritual significance of the vase is made quite clear through its resemblance to another bird-vase discovered at Gezer.* The Gezer dove-vase is supported on a pedestalled foot, which is the counterpart of that which is so characteristic of our libation chalices of Tomb 1. It is thus also probable that the Gezer ritual vase, like the other painted bird-vase from the same site, may have the same Philistine associations, if not provenance, as the one from Beth-shemesh represented by our fragments. They are all probably of the same date.

Items "6" and "14," in the second row, have an affinity with each other which points to Egypt. The much-weathered alabaster vase item "6" is itself Egyptian, and the situla of local fabric (item "14") looks like an analogous type. Both have suspension handles, but those of the clay situla are on the rim and are bored twice with holes placed vertically in such a way as to suggest ultimate derivation from a bronze water-pail of the situla type.

The fragment of the top of a jar with two handles and an extra bell-like spout on the shoulder is a very rare type. The fragment of a second, apparently of smaller size, was found in Tomb 1, and a complete example from Beth-shemesh and from this very tomb is in the collection of Mr. Herbert Clark at Jerusalem. The next object is a child's rattle with clay pellets inside, which can be seen through the aperture at either end.

The small teapot vase with flaring strainer spout has associations with Philistia, and it is essentially the same type as the painted Philistine vase

* *Excav. of Gezer*, II, p. 16, Fig. 216.

found in the Byzantine Area and shown in Frontispiece, and the other found by Bliss and MacAlister at Tell-es-Safi.* This vase, however, has affinities which presumably go much further afield, and one of the same type turned up in the cemetery of Curium in Cyprus.†

The vase shows no trace of decoration, but its ruddy-brown slip, polished by hand, with lustrous ribs going up and down and along the spout, puts it entirely into the same category as a fragment, including the spout, which turned up among the broken pottery from Tomb 1. This was painted in matt black in the characteristic Philistine manner. The clay of a deep red-brown colour and the wheel-make are the same in both cases. The fracture of the neck and handle of our vase is the one so usual in the case of these "teapot" vases.

The piriform vase (item "20") is essentially of the same type as the ordinary water-pitcher which has such a long history at Beth-shemesh. I have said elsewhere that it is important to note that Flinders Petrie has discovered models of this very type of vase at Rifeh, in Egypt.‡ The example from Tomb 1 may seem now to be of considerably later date than the XVIIIth Dynasty Egyptian models, but the affinity of type is there and the later dating does not invalidate the possibility that the land of origin might be Palestine after all.

The preference for vessels with rounded base is illustrated again and again in Tomb 1. Vase "18," which is a very common type of jug, is characteristic in this respect. When empty it is sometimes so difficult to make them stand on a plane surface that these vases have to be propped when photographed to keep them from being broken. On being filled it is, however, noticeable that they have much better equilibrium and a more certain centre of gravity, and it has, besides, to be remembered that in early times, just as nowadays in Syria, vessels of this kind have their natural place on uneven clay floors. The jugs and juglets of different sizes, shown together on Plate XXIV, amply illustrate this fondness for rounded bases. Many examples of vases of different types from Tomb 1 show that the flattened base was already there, but the rounded base with its long tradition managed to survive alongside this throughout history at Beth-shemesh.

* *Excavations in Palestine*, pp. 96 f., Plate XLIV.

† *Excavations in Cyprus*, p. 75, Fig. 134.

‡ *Annual*, No. 1, 71; *Gizeh and Rifeh*, Plate XXVIIA, 29.

The lamps of Tomb 1 form a special class of vessel by themselves. Their ritual significance is evident. They were apparently lit in the tomb on the occasion of funerary feasts, and there is hardly one of them that did not show traces of having been lit at least once. Items "22" and "29" on Plate XXII are typical examples of such lamps. Of this type there was a very large number in the tomb. It differs in several respects from the later type of the chamber tombs. In the first place, it has no flattened or raised base; secondly, it is not nearly so much pinched in at the spout, and, thirdly, the earliest specimens in this series have no turned-out rim.

This type of lamp in the process of making begins its existence as a simple saucer with rounded base, like that shown for comparison in item "23." The lamp is formed by pinching in the rim of such a saucer on either side by forefinger and thumb in such a way as to form a spout for the wick. The oil floats on water within.

The first change on this earliest type is marked by a greater pinching in of the rim to form the wick-spout in such a way as to give a more decided broken ripple at this part of the rim when viewed in profile. The shape of the saucer on which the lamp is modelled in the making brings this gradual transformation with it. The more the rim of this is pinched in and down, the more emphatic is the ripple in the outline of the bowl or saucer at this part.

Plate XXV will help to illustrate the gradual transformation the lamp underwent in the course of its history as represented in Tomb 1. Here items "1," "2," "3" show the earliest types present in the tomb.

The next phase in development is marked by a slight turning out of the lip which gives it a distinct profile of its own. At the same time the pinching in of the lip to form the wick-spout becomes more pronounced, causing the under curve beneath to be more rapid than at the back. This stage is illustrated by items "4," "5," "6."

The final stage in the process of development of the lamp as represented in Tomb 1 is shown by items "6," "7," "8."

At this stage the lamp begins to have a wide flowing turn-out rim and exaggerated pinch-in at the wick-spout which makes this of larger size in relation to the whole vessel than was the case with the earlier types.

At the very end of the development represented in Tomb 1 the lamp shows a distinct flat base, which is a new feature (item "8," which is turned upside down, shows this). The tendency of the earlier types to wobble with consequent spilling of the contents shows the advantage of this innovation.

To make good the drawback of the curved base some intermediate types show a tendency to flatten this, but of seventy-four examples examined only the specimen figured as item "8" showed a distinct base. It accordingly represents the final stage in development reached by the lamp in the period covered by Tomb 1, and it may thus be regarded as transitional to the characteristic types with base, first low and then gradually higher, of the chamber tombs.

This important series of lamps affords in this way one of many indications that the history of Tomb 1, which apparently began some time after the era of the XVIIIth Dynasty in Egypt and would thus itself belong to the Second Period at Beth-shemesh, comes down to the time when the chamber type of tomb with the divan arrangement was first inaugurated at Beth-shemesh.

SMALL OBJECTS FROM TOMB 1.

Bronze objects were copiously represented in Tomb 1 in the class of bracelets or arm bands. Examples of these are shown in Plates XXVI and XXVII. All were heavily corroded and presented a patina which varied from dark to bright green. Of the thirty bracelets photographed only one was of iron and this was the one shown in Plate XXVII, A (item "12"). Most of the smaller sizes could only have been for children or infants. The bracelets do not form a continuous ring but show two ends which meet in the case of the large specimens, while one end passes over the other in the case of most of the smaller examples. It may be asked whether some of the largest specimens shown in Plate XXVI were not anklets such as are still worn by women in the East.

The other objects in metal from Tomb 1 are shown in Plate XXVII, B. With the exception of the looped bronze needle which has a green patina the objects are much corroded and encrusted. The first six items are arrow heads, and of these the first three are in bronze while the second three are in iron. The three objects below (items "8," "9," "10") are bronze fibulæ with the pins lacking. Both types, the angular and the curved, are very current in Palestine and specimens have turned up at most of the excavations carried on in the country.*

* Gezer yielded a rich harvest of such. See *The Excavation of Gezer*, III, Plate CXXXIV.

OBJECTS IN FAÏENCE.

With objects in faïence we come to the class of amulets which were very numerous in Tomb 1, and were also frequent in the divan chamber tombs. It is characteristic of all these amulets, whatever the material, that they are bored for stringing on a thread to be carried round the neck.

Of the amulets in faïence the most numerous class is that representing the Sacred Eye of Horus. Plate XXVIII, A, shows those that were found in Tomb 1. There are eighteen specimens altogether, all being complete with the exception of the last, which is fragmentary. The faïence glazed surface which presents various nuances of pale blue-green is well preserved and has retained its lustre in the case of most of the specimens, but Nos. "3," "9," and "12" have suffered by corrosion and have, to a large extent, lost their glazed surface.

The last object illustrated is of a curious character. It is a small model, with a bored suspension handle on either side projecting above the rim, of a situla like that in pottery, also from Tomb 1, shown in Plate XXII, item "14."

FIGURINE AMULETS IN FAÏENCE.

Tomb 1 was particularly rich in figurine amulets of different kinds in faïence. All the specimens found, whether by sifting or otherwise, are shown in Plate XXVIII, B. Two of the amulet-figurines are inscribed with hieroglyphs on the back. These are the first and the last in the first row representing Isis. Several of the figurines are fragmentary and in these cases it is usually the upper part, including the head, which is preserved. All have a boring for suspension, though sometimes this is broken away. The figurine amulets are in the same blue-green faïence, with occasional details in black, as the amulets representing the Eye of Horus. The one exception is item "7" in the first row, which is in a pale yellow pipe-clay-like paste, without any lustrous glaze surface. A few of the specimens have the surface corroded or otherwise injured.

The most common type is the god Bes, of whom there are several characteristic representations in the third row. Next in frequency comes the goddess Isis, and after her Sekhet. The squatting monkey, No. "31," in the lowest row, and the hippopotamus or rhinoceros, which comes last of all, are exceptional. The first item in the bottom row is stamped with a cartouche.

SCARABS AND SCARABOID BEADS IN FAÏENCE AND OTHER MATERIALS INSCRIBED WITH HIEROGLYPHS AND OTHER SIGNS.

It is doubtful whether many of the Scarabs and Scaraboid Beads in faïence and other materials from Tomb 1 in this set are really imported. Most of them appear to be local imitations. There are altogether twenty-six specimens in the lot shown in Plate XXIX, A, but of those only one has the blue-green faïence surface glaze. Almost all the others are in a pale pipe-clay-like paste with no visible trace of a faïence glaze surface. One is in a red material which resembles the terracotta of ordinary pottery. A few have a lustrous surface. One of the scarabs (item " 2 ") has still adhering to it part of the bronze ring to which it belonged.

SCARABS AND SCARABOID BEADS IN DIFFERENT MATERIALS WITH SIGNS AND REPRESENTATIONS NOT HIEROGLYPHIC.

The set of twenty-one scaraboid beads shown in Plate XXIX, B, is in different materials, ranging from paste to stone and ivory. They are most likely all of local Syrian fabric and manufactured to suit cheap local needs. With the [possible] exception of the injured specimen in paste with the representation of a cow or bull the representations seem to be all unhieroglyphic in character.

ENGRAVED SEALS OF HIGH BUTTON SHAPE.

The fine seals shown in Plate XXIX, B, below form a sub-class under the set of scaraboid beads last described. Like them they are in different materials and they were used in the same manner as amulets or seals.

AMULETS AND OTHER OBJECTS IN DIFFERENT MATERIALS.

Of the objects shown in Plate XXX, A, several are of a curious and rare character. Leaving out of account the simple pendent amulets we shall single out for notice such objects as are exceptional in the series. Items " 1 " and " 2 " are bored amulets in carnelian, representing stone axes of the Neolithic Period. The larger of the two is broken off at the top where the boring comes. Its surface is decayed to a pale chalky colour. They probably were meant as a protection against lightning. The origin of the idea is to be found in the widespread belief that such axes fall from heaven in time of thunder

and lightning, rending trees and the like. Thus to secure such an axe and have it about one is to be protected against lightning for the future. The amulet representing the axe, especially of certain favoured materials, is then regarded as having the same apotropaic effect as the real axe concealed in a bed or in the roof of a house.*

Items "13," "14," "15" are also very curious. The objects are in ivory and look like amulets of wooden mallets such as are now used for fixing tent pins. No. "15" was found split length ways in two and had the handle (now restored) missing. The other two have the handle broken away in such a way that it is not now possible to say whether this was bored for suspension. The two amulets in faïence in the same row look like representations of a column. They are broken off at one end so that one cannot say whether they were bored for suspension or not.

Objects "18" and "19," also in faïence, are not bored and they may be a kind of chessmen. Item "20" is bored through the projection above. It is broken at the top and if the one end was originally like the other the object may represent a figure 8 shield. The whorls in the last row do not require special notice. It is natural to find them in connection with female burials and they probably do not have the amulet character.

AMULETS IN IVORY.—A FEW IN STONE SUCH AS HÆMATITE AND IN OTHER MATERIALS.

The objects shown in Plate XXX, B, are all in ivory except such in the lowest row as are in hæmatite and other stone materials, and are included for comparison.

It will be observed that the generality of the objects in ivory are amulets representing a club like that of Herakles. Several specimens are complete but some are broken, usually above. Those in the two upper rows are distinguished by sets of incised circles forming an eye-like type of decorative motive. A magical effect was possibly attributed to these. The weapon represented, if we can take the analogy of the club of Hercules, was probably the attribute of some divinity and, as such, like the axe or the hammer, was imagined to have an apotropaic effect.†

* See Blinkenberg, *The Thunder-weapon, passim*, for this wide-spread belief, and for many examples of the amulet representation of the stone axe.

† For similar amulets from Gezer cf. *The Excavation of Gezer*, III, Plate CCXXVI, below, and Vol. II, pp. 452-3.

The club amulets in ivory below (rows 3 and 4) have a different kind of decoration.* This consists of a set of parallel incised bands encircling the upper part somewhat below the boring for suspension, or of crossed hatched incisions between two such bands above and below. The second object in ivory in the lowest row is different and has no suspension-hole in the part preserved. It may be some sort of knitting-pin and not an amulet. Item " 14 " (last but one in the second row) is a mallet-like hammer, in ivory, like those shown in Plate XXX, A, but it is somewhat flat in shape and has the eyes like the club-amulets. The shaft is missing but the socket for it is on the underside. The much thicker and stumpier amulet in stone in the middle of the lowest row—included for comparison—possibly has the same underlying idea as the ivory clubs. The carnelian pendent bead next it on the right has a shape which suggests a different order of magical ideas.

BEADS FROM TOMB 1.

Beads of different kinds and in different materials, natural and artificial, occurred in hundreds in Tomb 1. Characteristic specimens are shown in Plates XXXI and XXXII. These were found either by the excavators while exploring the cave or by the women who sifted the earth. The system of giving tokens for each object found, secured the gratifying result that nothing was likely to escape notice or be concealed. People who are informed in such matters have assured the excavators that the work at Beth-shemesh has been so far the only excavation in Palestine from which hitherto objects have not found their way into the market. Asked for an explanation, I explained my system of tokens, and the visitors concerned were at once convinced that this was the real reason. They could see for themselves that curious and interesting objects had been turning up at Beth-shemesh, so that if there was little or no concealment it was not for lack of occasion but for lack of inducement.

Of all the different kinds of beads, natural or artificial, carnelian was by far the most frequent. It occurred in hundreds, there being as many as 106 in the series shown in Plate XXXI, A. The carnelian was evidently much appreciated as an amulet, and to-day in Palestine it is considered of great curative power against ophthalmia.

* *Cf. loc. cit.*

Other beads in the same set are mostly of dark or black hue and largely, if not all, of one kind or other of glass paste. Of these there were thirty-three in all.

Plate XXXI, B and C, show further sets of carnelians with occasional black beads.

Next to these in frequency come the artificial beads in Egyptian or Egyptianizing faience. A typical set is shown in Plate XXXII, A. Those that have the surface glaze well preserved usually exhibit a blue or blue-green hue. Some are worn away to an opaque white. Further sets of faience beads along with which are some in iridescent glass or glass paste of different kinds are shown in Plate XXXII, B and C. A few are in rock crystal, and these are likely to have been used as amulets or for their apotropaic or medicinal virtues.

ROCK-CUT CHAMBER TOMBS OF THE NORTH-WEST NECROPOLIS (THIRD BETH-SHEMESH PERIOD).

TOMB 2.

The chamber tombs with divan arrangement were in many respects the most important discovery we had made in 1911 at Ain Shems.

It is noticeable that such chamber tombs as are visible from the surface have a façade entrance with a regular portal closed by a stone slab. The portal is of door-shape, the framing of which is rebated for the portal slab to fit into it. This is correspondingly cut away at the edge to fit into the doorway like a stopper. A second block, which is more usually a bactyl-like cylinder, is propped or rolled up against the door to keep that in place.

The façade is formed by cutting away the sloping surface of the rock, and it is usually found advantageous to make the cutting so deep as to form a sort of court or yard in front, which may be a reminiscence of the house-yard. Sometimes it is necessary to descend into this, and there are usually rough steps cut in the rock for the purpose. One set of tombs discovered by us not far from Tomb 2, but further down the slope towards the fields, was grouped round a court of this kind and had a flight of steps cut into the rock which descended into the court from the north side.*

On entering the door of the tomb, which is always of small size like a window, one descends by two or three steps within and finds oneself, if the

* See General Plan of Tombs 5-9, Plate VII.

tomb is unencumbered or has been already opened, on the floor area of the tomb. This, like the tomb itself, is of rectangular shape and has on all three sides exclusive of the entrance a divan or bench which makes the whole a representation of an oriental house-room with a divan.

This arrangement rests on beliefs in connection with the cult of the dead which make the sepulchre the habitation of the departed in another life.

The arrangement we have described will be best understood by reference to Mr. F. G. Newton's Plans and Sections of these tombs shown on Plates IV to XI.

In describing the contents of these tombs it will be better to start with the objects found in the repositories, as these are earlier than those found in position on the divan and floor.

POTTERY FROM THE REPOSITORY OF TOMB 2.

The Repository of Tomb 2 was very rich in vase-finds. Plate XXXIII gives a characteristic series of these.

Items "1-5" are lamps arranged in a sequence to show the development of the base from the moment represented by the latest phase in the evolution of this in Tomb 1. In this tomb, of many examples examined, only one lamp had a base of this kind. In the Repository of Tomb 2 one example occurred without the base, and this resembled the latest type without base represented in Tomb 1. The lamp in question is first in the series shown. Next it (item "2") is a lamp with a very low base. This tends to get higher in course of time, and the latest phase in this process may be represented by item "5," which has a base almost half the height of the whole vessel.

The "pinch-in" of the rim to form the wick-spout goes through a corresponding process of evolution. This gets more and more exaggerated as time goes on until the utmost limit is reached, when the process stops short.

The relation between earlier and later will be made clearer if we note that of lamps with a distinct base only one specimen was recorded in Tomb 1 and that types with high bases like "4" and "5" were entirely lacking.

That, however, we are chronologically not very distant from the latest contents of Tomb 1 is shown by the saucers, jugs, and juglets, which seem to be old acquaintances from the specimens of the earlier tomb. A vase-type like "20," with two parallel bands in matt black encircling the body, occurred in two examples in Tomb 1, and the three vases are shown together in Plate XXXIV. Item "1" from Tomb 2; items "2," "3," from Tomb 1.

But there comes the dividing line in history all the same, and a type like the water-decanter " 28 " is entirely unknown in Tomb 1. When Tomb 1 was used for the last time this type had not yet come into use. It is rare even in the Repository of Tomb 2, for only two specimens occurred and these have a stumpy archaic appearance compared with the elegant shapes that occur on the divan. This type of vase was apparently just coming in at the moment to which the contents of the Repository are to be assigned. Then they appear plentifully and every tomb is full of them. On the divans they are by far the most characteristic type, and hardly any object surpasses them in mere numbers except the lamps. These apparently have a ritual significance in connection with funerary functions which of itself accounts for their greater numbers.

The figurine (item " 12 ") is the only other ritual object that suggests affinities with the earlier era of Tomb 1. It may be meant to represent a horse, or perhaps a bull, but its heavy forms are not nearly such a good attempt at characterization as are the figurines of animals from Tomb 1.

POTTERY FROM TOMB 2.

The pottery found on the divans of Tomb 2 was of exceptional interest, especially as it was, more or less, in position as left by those who had last opened the tomb before the final catastrophe which led to its abandonment.

The manner in which the objects were found grouped will be best realized by reference to Mr. Newton's Plan. Plates XXXV and XXXVI show the actual appearance of the interior, and of the contents as first seen by us. Plate XXXVI is especially interesting, as it shows the air-funnel in the right-hand back corner of the chamber, while below, in deep shadow, is the opening into the Repository which contained the vases and other objects just described.

A glance at the Plan and the photographic illustrations will reveal at once the predominance of the one-handled water-decanter over every type except perhaps the juglets of different kinds and the lamps. Its coming into prominence has an exceptional importance because, as we have pointed out, it is the one outstanding type in the chamber tombs that does not occur at all in Tomb 1, while in the Repository of Tomb 2 only two specimens of a somewhat archaic type turned up.

The appearance of the type will be best realized by reference to item " 14 " on Plate XXXVII, which shows a characteristic group of vases from Tomb 2. The vase is wheel-made and has a smoothed clay surface on terracotta red clay.

In contrast with the frequency of this type of vase is the rarity of the tiny black hand-polished juglet. This was frequent in the Repository, and examples are shown on Plate XXXIII, but only one was found in position on the divan and this was the specimen item " 5 " on Plate XXXVII. It seems to have been left behind when the others that occurred in the Repository were removed from the divan. It is thus seen to be on the point of vanishing just at the time when the water-decanter already referred to was coming into fashion. But, as we have seen, it had a long history in Tomb 1, while the decanter had none, and was but a thing of yesterday.

The ordinary saucer or bowl (which is one of the types that has the longest history in Palestine) is plentifully represented in Tomb 2, as well as in its Repository. The pair, items " 11," " 12," of which the smaller is made use of as a cover to the larger, is interesting from the point of view of the funerary feast ritual, because it was found to contain mutton bones. The funerary feast was not merely shared in by the relations of the departed, but regarded as partaken of by the soul of the dead person himself. He could even partake of it after the funeral or anniversary commemoration was over, and so a portion was purposely left for him. The jug next these, item " 13," is relatively of too rare occurrence in all these tombs to have been a mere receptacle for water, and the clay stopper may indicate that its contents may have been of some more special value, as, for example, milk or olive oil. The vase showed traces of a ruddy-brown hand-polished clay slip, which went in over the rim on terracotta red clay containing particles of pounded limestone.

The water-jar shown below (item " 17 ") is of extraordinary frequency in the city deposits of the Third Beth-shemesh Period, but this was the only example found in the tombs. It has a peculiar interest as being the type that is sometimes distinguished by having stamped-inscribed handles. It was found at the foot or inner end of the right-hand divan next the Repository, in the position shown in Plate XXXVI and indicated on the Plans and Sections. A ruddy-brown discoloration was discernible on the under side, suggesting that it may have contained wine, and the bowl (item " 18 ") was there ready at hand for it to be poured into.

The outer surface of the jar has been smoothed to a fairly fine

surface, but there does not seem to be any special clay slip or wash. The surface and clay vary from buff to a lighter terracotta. The clay is impregnated with pounded limestone particles intended to secure greater cohesion. It is the usual local fabric of Beth-shemesh of the Third Period, but the type and the rounded base go back to the very beginning of history there.

A vessel with this kind of base usually requires some sort of propping to stand if it is not made to lean against a wall. Cylindrical bases with incurved sides on which such jars could be set were actually found to occur in the corresponding third stratum in the city (see Plate XXI, item "8").

The bowl, which is technically well finished, like all the pottery from these tombs, has a ruddy chocolate-brown clay slip, carefully polished by hand, inside and out, on terracotta red clay. The surface shows very fine rills, which have been smoothed away but which indicate wheel-make. Indeed, the use of the wheel is so universal in the case of all this pottery that it is not necessary to make further reference to the fact.

The high level of workmanship which characterises the pottery of these tombs is particularly apparent in the case of the bowl and saucer types. The saucer, made up from fragments, shown as item "16," was a model of refinement in this respect. It had a semi-lustrous ruddy-brown, hand-polished clay slip, altered to a metallic hue probably in the firing, on finely levigated terracotta red clay. It was so thin in section as almost to deserve the name of egg-shell ware like that of Crete, but its real affinities are quite native and we need not be surprised at the technical perfection of the workmanship, since we have to remember that the wheel was in use from a very early period at Beth-shemesh. The wheel probably penetrated into Palestine from Egypt and, significantly enough, the one kind of imported ware from the sea-direction that is at all much in evidence in the earlier period, the base-ring ware of Cyprus of the time of the XVIIIth Dynasty, is made by hand.

An almost equally refined specimen technically is the small bowl item "9". It had the same slip and clay as the other but without the metallic coloration produced by firing. Curiously enough, one fragment of this was found on the left-hand divan, while the other had got stowed away in the Repository. Its proper context is thus with the earlier elements of the tomb. But on the other hand we cannot say for certain that because a vase happens to be on the divan it is necessarily to be associated with the later elements of the tomb. It may have been left behind and had a good chance of being left in its place if not in the way. The strongest motive in the other direction

may have been the memory that certain vessels were a gift to a departed person and ought thus, out of feelings of reverence, to be kept together. We have already referred to the juglet (item " 5 ") as having been probably left behind, and that its true companions were really in the Repository, but then it is so tiny that it may easily have been overlooked.

SMALL FINDS FROM TOMB 2.

The few small finds from Tomb 2, six in all, were found in the Repository. There were four engraved beads in different materials of the scarab class, two being scarabs and two scaraboid. Besides these there were a lozenge-shaped carnelian bead and a bronze fibula with angular bow. These are shown in Plate XXXVIII (items " 1-6 ").

Item " 1 " is a scaraboid bead in blue glass paste in imitation of lapis lazuli. Item " 2 " is a scarab seal in a deep olive-green stone resembling serpentine. On it is represented a winged sphinx. Items " 3 " and " 4 " are in faïence and have hieroglyphic inscriptions. The carnelian bead (item " 5 ") is the only one of this square shape, bored transversely in this particular way, that occurred in the tombs. The bronze fibula (item " 6 ") is a survival from an earlier era, and three specimens, all in bronze, occurred in Tomb 1. The fibula is clearly an intrusion from the early Hellenic world into the Semitic conditions of Palestine and it is possible it may first have come in with the Philistines and not as a mere import from the same quarter.

TOMB 3.

Tomb 3 stood open but was partially encumbered with silted earth ; we had this cleared for the sake of examining the pottery and rescuing any small objects that might have escaped the notice of the plunderers. The sifting of the earth by means of sieves was already showing us, in the case of Tomb 1, how much of value might be recovered in this way.

This tomb is situated at the edge of the limestone bluffs in a position east of Tomb 1, which gives it an outlook west. It has the usual recessed façade and small window-like doorway, and this at once led us to expect that it belonged to the same period as Tomb 2. Within, it had the same divan arrangement as Tomb 2, but those who cut it found that the back part of it presented fissures which formed the front part of a shallow cave. This had apparently not as yet been put to any use, for it contained no pottery or

other object. A plan and section of the tomb, by Mr. Beaumont, is shown in Plate VI.

Nothing in the tomb was found in position and all the pottery that existed was in fragments, with the exception of a few chipped lamps. The pottery types and the lamps showed, however, quite clearly that the sepulchre belonged to the same period as Tomb 2. Most of the shapes of Tomb 2 occurred, including the very characteristic water-decanter.

This showed a marked tendency to angular contours, which is a sign of relative lateness within the period to which the tombs, as a whole, belong. Similarly the lamps exhibited a high base, an exaggerated pinch-in at the wick spout, and a tendency to greater weight on account of the solidity below, which should be taken as indicating lateness in the series.

The whole *facies* of the pottery suggests a date for the tomb at least as late as the very latest objects in Tomb 2.

SMALL FINDS FROM TOMB 3.

Tomb 3, as already remarked, had been thoroughly ransacked, but there is always the hope of finding a Repository untouched and in the course of clearing, with this hope in view, the objects shown in Plate XXXVIII, items "7-13," were found. The system of giving a paper token in return for each object discovered was a strong inducement to let nothing escape notice.

Of the objects in bronze ("7-11"), the first item (item "7"), an earring with drop to it, appears for the first time, and this type was not noticed in Tomb 1. It may accordingly be regarded as coming in with the chamber tombs. The curious object in bronze (item "10") is unique in these tombs. The trefoil arrow-head (item "11") is also the only one of this type that occurred. It may thus be taken to be rare in comparison with the leaf-shaped arrow-heads in bronze and iron. Item "13" is a Phœnician glass bead, and it is likewise the only example of this particular elongated type which we found in the cemetery.

TOMB 4.

Tomb 4 is situated a few paces away from Tomb 2 up the slope and in a south-west direction. It has the usual rock-cut façade with only a very slight ledging out at the top, and there is the usual descent by rough steps to the entrance, whence again one steps down three times to get into the interior.

This, as seen from the Plan and Sections (Plate VIII), shows a small chamber not opening out straight from the entrance but diverging to the left. What one has thus got within the entrance is a short passage-way, which is quite unusual.

It will be seen at the same time that the chamber is very much narrower than that of Tomb 2. The result is that as the divan arrangement must be of convenient proportions for the reception of the dead this is managed at the expense of the floor-space. This is accordingly contracted to such a degree as to be almost only reminiscent of its function as a floor.

In dealing with Tomb 2, I have already pointed out the final result of this process of contraction of the floor space as seen in later times as, for example, at Petra, and in the so-called Tombs of the Kings at Jerusalem.

I was, however, hardly prepared to find an intermediate phase in the process of contraction represented at Ain Shems itself, and that in a tomb of the same period as Tomb 2.

The arrangement of the tomb and its peculiarities come out very clearly on the Plan and Sections.

On the Plan the contracted proportions of the floor can be realized from the fact that, as shown, it is only 50 centimetres or 1 foot 8 inches wide. The back divan is, however, still of sufficient length to receive a body fully stretched out and the side divans are proportionately long in order not to encroach on the already somewhat contracted area covered by the back divan.

Although the ceiling is flat, all the walls of the chamber, as shown on the Sections, are curved pavilion-fashion. The constructive advantage of this arrangement is apparent if defects in the formation of the rock be taken into account.

At the inner end of the entrance passage, and recessed within the left hand corner here, is a repository pit like that of Tomb 2. In it were found the pottery and other remains representing the earlier burials of the tomb.

Although the top of the façade was visible from the surface, the front was found silted up to above the doorway. The door-slab was gone. The tomb itself was silted up to within 1 foot 4 inches of the ceiling. On the divan nothing was found in position, and the fragmentary pottery showed that the tomb had been repeatedly searched for valuables.

In the right-hand back corner of the passage area in front of the divan occurred a group of vases evidently more or less undisturbed but which had possibly been previously on the divan. In that case they may have been

removed from there with the unfulfilled intention of stowing them away ultimately in the Repository.

POTTERY FROM THE REPOSITORY OF TOMB 4.

The pottery from the Repository of Tomb 4, and that in the corner outside it, show the same sequence of earlier and later elements as that of Tomb 2.

The vase group from the Repository is shown in Plate XXXIX, A, and that from outside it in Plate XXXIX, B.

By comparison of the two groups one arrives at some indication of the sequence. The early type of juglet with black hand-polished pigment slip occurred in the Repository, and four examples of this are shown in Plate XXXIX, A, items "5," "6," "8," and "9." They did not occur among the small group from outside, though this may have been chance. What did occur here was a juglet of similar type, Plate XXXIX, B, item "6," but in a pale buff clay slip, which indicates relative lateness.

It may be significant in a similar sense that the characteristic water-decanter, Plate XXXIX, B, item "5," occurred outside but not in the Repository.

The taller baggy type of juglet was found both in the Repository and in the tomb. Examples are Plate XXXIX, A, item "10," and Plate XXXIX, B, item "4." But this type of vase can hardly be made use of to establish any dividing line of chronology in the ceramic series, because of its continuous survival from the earliest period at Beth-shemesh.

It begins its history at Beth-shemesh with a pointed base, and examples of this were found in the Grotto Sepulchre of the High Place Area, see Plate XVII, items "1," "14." In the Middle Period the base is already rounded and specimens of this type occurred in Tomb 1, see Plate XXIV, item "9," which is shown in its natural entourage of similar types. In the Third Period, to which the chamber tombs of the North-West Necropolis belong, it is of regular occurrence. For example, it occurs in Tomb 2 and its Repository, Plate XXXVII, items "7," "10," and Plate XXXIII, item "26."

So long-lived is the type that it survived these tombs and even the destruction of Beth-shemesh by Sennacherib, for it is found to turn up once more in the superficial deposits of the Period of Reoccupation. Two such juglets were found inside characteristic oil jars of this period belonging to the environment of the High Place Area. The companions are shown in Plate XIX, items "3," "4," "5," "6."

These juglets show on the outside the ribbing produced by the wheel more and more distinctly as time goes on; and towards the end of the Third Beth-shemesh Period it becomes so distinct as almost to be a characteristic mark. It even looks as if in course of time the appearance of the ribbing came to be adopted on purpose. There is, indeed, a tendency for all the types of vases to show it in the same way in this Third Period. In the earlier, First and Middle Periods certain types of vases, at any rate, carefully avoided it, possibly as a matter of popular taste.

SMALL FINDS FROM TOMB 4.

The small objects from the Repository of Tomb 4 are shown in Plate XL, items "11-26," while those that occurred in the tomb form the series "1-10."

Of the small bracelets from the Repository which look as if they were meant for very small children, two are in iron, "13," "15"; two are in bronze, "11," "12"; and two in dark Phœnician glass, items "14," "16." Of the items below, five are in bronze, namely, items "18," "19," "21," "23," "24," and among these emerges the fibula with angular back (item "23"). It can thus be said that bronze still dominates in the Repository as against iron. The bead "17" is some local imitation of striated Phœnician glass in ordinary terracotta with an enamel or glaze surface, now almost all scaled away. The flat, button-like object next it is in ivory. It has a rosette motive which may be of direct Cypriote provenance, though its origins in a much earlier era may have to be sought in Crete.

The objects from the chamber of Tomb 4 are shown above in items "1-10." It may be significant that the three objects in metal, "6," "8," "9," a ring, an arrow, and a bracelet, are all in iron. In the Repository we have seen that bronze predominates over iron. The object in ivory (item "10"), which looks like a gong hammer, is unique, this being the only occurrence of it in the tombs.

Of the five inscribed beads (items "1-5") four are ordinary scaraboid amulets, while item "5" is a seal in some schist-like stone.

TOMB 5.

Tomb 5 is one of a group with four others, 6, 7, 8, 9, which are situated not far from the limestone bluffs a few paces away to north-north-east of Tomb 2, and somewhat further down the slope.

The façades of all the tombs with the exception of number 9 are so disposed in relation to each other as to occupy the sides of a sort of sunk rectangular court. Tomb 9 has a separate façade entrance of its own. This arrangement of the group will be best understood by reference to the general Plan of Plate VII. From this it will be seen that steps lead down to the interior of the court from the north side next the north-east angle. Tomb 7 has its entrance in the free space alongside the steps on the right-hand side as one goes down. Tomb 5 is on the side of the court opposite the stair, so that its façade looks north. Tomb 6 is on the right-hand side of the rectangle and faces east. Tomb 8 is on the left-hand side and accordingly faces west.

The tombs present various anomalies both internally and in their spatial relations to each other. These all appear on the general Plan of the group.

The court was filled up with silted earth, while the rock cropped up on the surface all round. By the months of June and July all vegetation had withered away, but there were green patches here and there, and these formed a notable exception. One such green patch occurred just where the court of our group of tombs occurs. The reason is one that is of welcome help to the archæologist in search of tombs. The depth of soil where such courts of façade entrances or shafts occur enables plants of certain species to retain their verdure when all around is arid desert. For this reason such a green patch, in nine cases out of ten, signifies the presence of a tomb, and for this reason also the summer is the best season of the year for the exploration of cemeteries. Our foreman of works, Jusuf Kanaan, out of his long experience, especially in similar limestone country at Gezer, was able to make fertile use of these indications. Skilled workmen from Abu Shusheh, trained under Professor Macalister at Gezer, were able to help effectively in the search.

If, on the other hand, tomb exploration for one reason or another has to be in the spring when all is green, there is still a resource of a more subtle kind. Certain plants with very long roots prefer spots where the subsoil is deep. Accordingly by looking out for spots where such plants appear massed together, while they are absent all round, one has every chance of lighting on the position of a tomb. These plants are the same that in the summer remain green while all other vegetation has withered away.

Tomb 5, the first of the group to be opened, had its door-slab in position but not quite properly adjusted. It was propped up by means of a large rough elongated block resembling those of the High Place in the city. The

repeated presence of such blocks in the cemetery led us to suggest for them a ritual significance in connection with the cult of the dead.

Having been entered, the tomb was found to be silted up with earth to about 3 feet from the ceiling. On the removal of this, except at one part, for the sake of observing the stratification of the silt, the tomb was found to be of the same rectangular type, with divan, as Tomb 2. A Plan and Section of the tomb, showing the grouping of the pottery, are given on Plate VIII. From these it will be seen that the sepulchre is considerably larger than Tomb 2, being 13 feet from front to back and nearly the same width (12 feet 8 inches). The doorway, which was somewhat to the left-hand side, was placed askew so that its axis was obliquely in the direction of the left-hand divan.

The silt on the left-hand divan showed in section two distinct strata. Below, the earth next the surface of the divan for about 8 inches had a paler appearance than the loamy earth higher up. It was impregnated with limestone dust that had fallen from the ceiling, and also from the walls alongside. Crumbled bones mixed with the limestone dust help to emphasize the paler hue. In this stratum occurred all the pottery on the divan.

Above this was a much darker loamy stratum of silted earth proper, 1 foot in thickness, which contained no pottery except what was fragmentary and had got strayed from its context.

Except in the front corner of the left-hand divan very little pottery was found in position other than groups along the edge of the floor. It was thus clear that the tomb had been well ransacked, and this comes out very significantly on the Plan, which shows the grouping of the pottery as it was actually found.

The left-hand back corner of the tomb, above the divan, was found to have been scooped into a shallow cave in the left direction, and to give access thus to Tomb 9, which does not properly belong to this group and has a separate façade of its own. This may have been the work of tomb hunters or it may have been the original intention to arrange a repository here, in which case it is possible objections were raised by the owners of the other tomb and the work stopped.

The right-hand divan again showed its wall broken open, and from this wide aperture one could see across into the left-hand chamber of Tomb 6. The rock is unsound and has vertical fissures at this part so that the cross passage in this case may be accidental and unintentional. At any rate it is needless to

assume that the owners of Tomb 5 were so indiscreet as to attempt cross communications with other tombs to right as well as to left.

THE POTTERY OF TOMB 5.

The types of pottery that occurred in Tomb 5, so far as observed, were exactly identical with those of Tomb 2.

The only type that turned up here and which was not noticed in Tomb 2 was the vase shown on Plate XLI, item "6." This vase, which resembles a mug without a handle, had a broad neck-band and a narrower body-band in matt cream-white pigment on a purple-tinted brown clay slip, on ruddy terracotta clay. It is probably not a local fabric, and the type strikes one as of great rarity in these tombs. The wheel-make is very noticeable on the exteriors of most of the vases of this group. The water-decanter (item "14") has the effect of the rilling enhanced through the device of polishing the clay slip horizontally on the surface by hand in such a way as to bring this out still more. The juglet with a light ground (item "15") shows a tendency to enlarge and elongate as if in mimicry of the baggy type shown as item "13."

Passing to other objects, two interesting terracotta figurines have to be noted as among the finds from this tomb. These appear as items "9" and "10." They are also shown on a larger scale in Plate XLII.

The one represents a male, to judge by the chest, and the body is represented by a pillar broadening to a base below and doubtless meant to indicate long Oriental robes. The face is beak-nosed and intended to suggest a strongly Semitic type, and there is no trace of any Egyptianizing influence. Correspondingly no mould was used for modelling the face, and all was made by hand. The arms are held in front in the usual ritual pose. They are broken off. There is also a chip out of the right side of the base. It has a ruddy-brown smoothed surface on ruddy-brown clay. No sort of paint is discernible. The figure stands 13 centimetres ($5\frac{1}{8}$ inches) high. It was found along with the pottery group in the left-hand back corner of the floor.

Of the second figurine, which represents a female with very full bosom, only the upper part to the waist, including almost the whole of the arms, is preserved. It looks as if the figure, when entire, were of slightly smaller size than the other, but there seems to be no doubt that they formed a pair and every probability that they represented a divine pair as man and wife.

The eyes seem to have been indicated by means of some kind of pigment and there appear to be traces of a matt white paint about the neck. The clay

is similar to that of the other but the terracotta is of a more ruddy hue. The figurine was found with the pottery group in the front corner of the left divan.

Should we be able ultimately to associate the Egyptianizing figurines with the earlier phase of culture represented in Tomb 1, the occurrence of this entirely different Semitic facial type in the chamber tombs may help us towards interesting conclusions as to who the people were, who were responsible for a type of sepulchre so very characteristic as these divan tombs. There are already, as we have seen, cogent reasons for the suggestion that the earlier connections of these tombs are with the higher table-land of Judah and with the further east and south.

SMALL FINDS FROM TOMB 5.

In Tomb 5 all the objects in metal were of bronze with the exception of the leaf-shaped arrowhead, Plate XLIII, item "23," which was in iron. The amulet figurine pendant (item "1") was singular as being also in bronze, while all the others found in these tombs were in faience.

The earring with drop occurred twice in bronze to remind us once more that they are coming into fashion. One example, Plate XXXVIII, item "7," was noted in Tomb 3, as a first appearance. The small bronze earring (item "26") has a thickening below, which also begins to be observable for the first time.

The fibula (item 11") is of a type which has been observed already. It occurred in Tomb 1, where it has earlier associations which point to some foreign influence beyond seas, perhaps in the Hellenic world. It may have been part of a new Philistine mode imitated by Canaanite ladies of Beth-shemesh. That it was used in the period of the Dual Monarchy seems to be shown by its occurrence in Tomb 2 and again here. It, the needles (21, 22), and the earrings are evidence of female burial in the tomb.

TOMB 6.

Tomb 6 has been already referred to as opening off the west or right-hand side of the small rectangular court, around which this set of tombs is grouped. A Plan and Sections of this tomb, with its annexes, are shown on Plate IX.

The entrance to the tomb was found to have its door-block in position, but not carefully fitted. This could be taken as an indication that the tomb had been disturbed.

The silted earth which filled up the tomb almost to the ceiling prevented us from realizing its anomalous character. The back chamber was quite unexpected, and it was a still greater surprise when we found a doorway opening off the left-hand side next the entrance. This doorway was of rectangular shape like the doorway at the back, but it was wider and higher. It was found hacked away on either side, and this may have been done by those who ransacked the tomb.

The whole tomb had an unfinished, anomalous appearance. There was an unfinished divan on the right-hand side, much shorter and narrower than usual, and the rock above was only partially scooped out to form a sort of shallow grotto-recess.

The pottery on this divan, as indicated on the Plan, seemed more or less in position. It repeated all the types of Tomb 2 in its most advanced period. It is possible that the latest burial in the tomb may have been made here. There was another small group of the same kind of pottery in the left-hand corner of a step-ledge just within the entrance. There was no other pottery in the chamber that could be considered as in position.

Instead of a divan at the back there was a rather high doorway into an inner chamber, which was only partially scooped out into a sort of grotto with a smaller recess behind it at a higher level. A few vases of the water-decanter type and an elongated juglet vase lay on the floor.

The chamber within the doorway on the left-hand side inclined obliquely to the right and turned out to have the regulation divan on all three sides. The right-hand wall had a hole through to the back part of the main chamber. This was possibly accidental, but it may have been for light.

The left-hand wall was found to have a long aperture into Tomb 5, and it has been already suggested that this may have been the result of some miscalculation if it was not the work of the tomb hunters.

The tomb had a small group of vases in the front corner of the left-hand divan. The rest of the divan area was empty, except for a juglet of the elongated type on the back divan. Another set of vases was arranged along the edge of the floor area in the manner indicated on the Plan.

THE POTTERY OF TOMB 6.

The results obtained from these tombs were, as regards the pottery, of a cumulative character. Tomb 6 affords its own illustration of this fact. The general facies of its pottery was the same as Tomb 2. A rare type in Tomb 2, the vase with stopper, Plate XXXVII, "13," also occurred in Tomb 6. This was the small jug, Plate XLIV, A, "9," which was fractured at the rim and had its handle broken off, it had the same ruddy-brown hand-polished clay pigment slip on the same red-brown terracotta clay with white limestone particles in it. The bottom was flattened to a base like that of the other, but both wobbled in the same way at the slightest touch. They were almost more difficult to get to stand upright than the more squat vases, with rounded bases. All this class of vases, however, shows much more equilibrium when full than when empty.

The water-decanter was almost certain to be there, but the specimen (item "6") has a somewhat archaic appearance compared with the example directly below it (item "10").

The last vase shown in this group (item "11") appears for the first time. It has the favourite rounded base and a warm terracotta-red surface on terracotta-red clay. Further specimens, one with a flattened base, were afterwards found in Tomb 8. Their rarity makes it possible that they may not be a fabric of Beth-shemesh.

The only vase in metal that we noted in the necropolis was the two-handled bowl in bronze from Tomb 6, shown in Plate XLIV, B, item "2." The vase has been partially set up from fragments. About one-third of the rim and two-thirds of the body of the vase are preserved. The other vases of an analogous type in clay are added for the sake of comparison and are from other tombs of the cemetery.

The vase that most resembles our bronze bowl is item "1." It has the same low shape and the rim shows the clay in a double layer. It is also touched up here by hand in a way which seems to betray the effort to be as like the bronze as possible. One of the two handles of this is broken off below.

The four other vases in clay have a rilled profiling of the collar, which is different from the incurved neck of the bronze vase; but the rilled collar seems equally to betray the influence of the bronze technique.

But it is only influence and it is likely that the prototype for this shape

originated in clay technique. All the clay vases are of a ruddy red-brown terracotta clay and all are wheel-made.

TOMB 7.

Tomb 7 has its façade and entrance in the narrow space to right of the steps which lead down into the rectangular court referred to already. The position of the tomb in relation to the others will be best understood by reference to the general Plan of the group.

The tomb was found with the door block in place but not well adjusted. Inside, the tomb was entirely silted with earth to the ceiling. On the removal of this the usual divans appeared on either side, but there was no back divan, and to make up for this the rock alongside the side divans was scooped away grotto-fashion in such a manner as to afford double the amount of room. For the general arrangement of the tomb and the distribution of the pottery it will be helpful to consult the Plan and Section shown on Plate X, and the pictures of Plate XLV.

If we seek to account for the somewhat abnormal arrangement it may be found in the fact that this group of tombs is not far from the lower edge of the rock bluffs. This tomb is, moreover, on the north side. Accordingly, any considerable extension of its area in that direction might bring with it the risk of coming to the sloping surface of the rock, and so entirely destroying the value of the tomb. It was possibly this consideration that led to the omission of the back divan. To make up for the omission, as we have suggested, the side divans were proportionately enlarged behind.

POTTERY FROM THE REPOSITORY OF TOMB 7.

The Repository of Tomb 7 was of the usual type we were now accustomed to expect. It widened somewhat from the mouth into the shape of a small cistern below. It did not encroach on the space of the divan, being recessed beneath the rock wall at the head of this, in the direction of Tomb 8. It thus, however, got to be so near the neighbouring tomb that we found the thin rock partition between the two broken away. Consequently, at first sight it seemed doubtful to which tomb the Repository belonged, if it was not shared by both. This would have been unfortunate from the point of view of our study of the finds. These demanded rigid separation, if we were to arrive at any chronological clue depending on the

sequence of types. It was only when we discovered that Tomb 8 had a Repository of its own that our doubts were set at rest.

The pottery found in the Repository of this tomb, 7, was scanty compared with that which appeared in position in the chamber itself. The usual bowls and saucers were there but the characteristic water-decanter of the divans was absent. A group of the vases found is shown on Plate XLVI. Reminiscent, typologically, of an earlier time are the two squat jugs with rounded bases (items "9" and "13"). The type occurs in Tomb 1, where in this form it is probably representative of a late era at the end of the Middle Period. It is seen on the point of transformation in the chamber tombs. There is no doubt that in course of time the rounded base and tendency to wobble came to be felt inconvenient. When full these jugs acquire a certain degree of equilibrium and a more stable centre of gravity, but when empty they can hardly ever be got to sit upright. Our item "9" shows this clearly. It is sometimes most difficult to get a photographic pose of them. They are apt to become unsteady if touched; a slight breeze will occasionally cause them to move and any touch to the shelves may make them roll off altogether and smash. To keep them steady on the shelf, and avoid all risk of breakage, they have to be propped up.

THE POTTERY FROM TOMB 7.

The pottery from the chamber of Tomb 7 afforded illustration of further stages in the evolution of the jug with rounded base referred to in connection with the ceramic finds from the Repository. The group shown in Plate XLVII is altogether one of the most interesting and important from these tombs.

Item "19" is a jug of this type of the older, more conservative form. But the jug shown in item "6" already has a tendency towards a flattened base. As can be seen from the picture, however, this only makes it wobble more than ever. The jug (item "8") shows a further phase in transformation of the type. The flattening of the base now becomes so emphasized at the expense of the body of the vase that this presents a truncated appearance. The handle and the neck at the same time elongate, the neck tending to widen above instead of narrowing towards the rim as before. The base is not yet quite flattened; the vase still wobbles perceptibly, like the other, and this is towards the handle, because the greater weight is on that side. When full the vase stands more upright.

The vase with the clay stopper (Plate XXXVII, item "13") from Tomb 2 shows the final stage reached by this type of vase at Beth-shemesh. The body still shows evidence of the truncation, but the base is somewhat flatter and the proportions better. Yet it is more top-heavy than ever with the stopper.

Item "7" from Tomb 7 was the only vase of this shape that we had observed in these tombs. It might possibly be a further development of the type we have been discussing in the direction of elongation and a quite steady base.

Vase "18" recurs in Tomb 2 ("15") in smaller size, and with the same flutings round the rim. The type has a rounded base, and wobbles like the other, and it hardly acquires a quite flat base before Beth-shemesh is destroyed. It appears once more among the people of the Reoccupation Period with entirely flat base, but in very outlandish company that seems to have come from elsewhere with the squatters of that time.

The libation vase, which figures as "5," is of exceptional interest.

The vase was of the juglet type, but with flat low base. The juglet rim was, however, less turned out than is common at this time, and was probably meant to receive some sort of cap.

The exceptional thing about this vase was that it was made to represent the torso and head of a man with beard. Front and profile views respectively are shown in Plate XLVIII. All the features of the face were rendered, including eyes, nose, mouth and ears. The arms were held in the usual ceremonial way in front with the hands towards the bosom. Here was a funnel spout broken off and represented as held by the hands, which were also broken away. The vase was found in fragments in the back of the grotto recess behind the right-hand divan; but with the exception of the parts just referred to and a hole on the left-hand side, the vessel, when set up, was found to be complete.

The vase showed through thick incrustation a warm ruddy-brown clay slip on friable terracotta clay with white limestone particles in it. The wide dominance of the wheel was shown by the fact that the body of the vase was made by wheel, while the parts representing human features were modelled by hand.

What is particularly remarkable about the vase is the lively fashion in which a strongly marked Semitic type is represented. This comes out very clearly in the profile view. There is no mistaking the characteristic

treatment of the features, while the style of beard is one that can be seen among the genuine Bedawi of Palestine, especially east of the Jordan at the present day.

It has been said that the two figurines representing a pair of divinities found in Tomb 5* showed nothing whatever of that Egyptianizing influence which was so strongly marked in the case of the figurines of Tomb 1.† This is still more true of the individually rendered strongly marked Semitic head of our libation vase. The features of this could not possibly be mistaken for anything Egyptian.

Considering the ritual significance inseparable from this type of libation vase, the human features can hardly be taken as a mere decorative detail. The head represents some divinity and if we were simply to ask what Canaanite male divinity were most likely to be adored at Beth-shemesh the answer would be Shemesh himself. Is Shemesh meant on the vase or one or other of his Canaanite equivalents?

What is perhaps more important is that the ritual associations of such libation and figurine vases have a religious significance in domestic life to which their funerary uses stand in a derivative relation. The chamber tomb is modelled on the abode of the living, and the images put there to keep company with the spirit of the dead person are the same images of domestic divinities that have played so prominent a part in early Semitic religion. Not merely does the household believe that the household divinities protect their devotees but that their images are a protection. The images protect by magic, they ward off evil, they have apotropaic effects.

This was why Rachel had stolen the images that were her father's.‡ She had need of them for her new home in the land of Canaan.

Not only, however, were these images of household divinities believed to have supernatural protective powers in the homes of the living but they were considered to be equally potent in the abodes of the dead. This was why they were put into the tombs.

The store-jars shown on Plate XLIX, and Plate L, were found in position, the one at the foot and the other at the head of the right-hand divan of Tomb 7. The more complete example with two handles shows a

* See Plate XLII.

† See Plate XXIII.

‡ Genesis xxxi, 19.

distinct tendency of these to rise towards the neck in course of time as compared with the type in its earlier form. The jar, Plate L, which is much more fragmentary, probably had four handles. It bulges towards the diminutive ring base in the same way as the similar jar from Tomb 8.*

TOMB 8.

Tomb 8 has its façade on the east side of the sunk court which unites this set into a group. It thus has its entrance looking west.

A Section and Plan of the tomb are shown on Plate X.

The door-block was in position and much less casually adjusted than was the case with the others of the group. It was fixed tight by means of stones set in along the edges. It had a rough stone cylinder rolled up against it to keep it all the more firmly in position. Stone cylinders like that referred to are to be seen about elsewhere in the North-West Necropolis so that they can be regarded as characteristic at Ain Shems. Not only so, but they have entirely the same appearance as the bactyls or sacred pillars of the High Place at Beth-shemesh. I have therefore suggested in another place that, in connection with the cult of the dead, they may have been used in funerary ritual to call down on occasion the spirits of the departed if the presence of those was desired at memorial feasts in their honour.

When the tomb was opened it was found silted up to the level of the top of the back divan and to considerably above this level towards the front. Thus the side divans were concealed from view except the right-hand one at the inner end.

It was evident that the tomb was of the same normal divan type as Tomb 2. It is, however, somewhat larger, the divan is higher and the ceiling, on the other hand, lower. Four steps descending with individual gradient lead down from the entrance on to the floor of the tomb.

Views of the interior are shown in Plates LI and LII.

As seen by the Plan, the tomb is almost symmetrically rectangular except at one part, the head of the left-hand divan. Here the rock-wall begins to curve in in the direction of the entrance, so that the divan is made narrower at the part next the head (where stands the jar shown in Plate LII) than it is at the foot.

* Plate LVIII.

This bend presupposes a consciousness of the presence of the Repository alongside, belonging to Tomb 7. The bend away was made to obviate the risk of breaking into this. This in turn would mean that Tomb 8 was hewn subsequently to the Repository and by implication that it was also later than Tomb 7 itself. At the head of the divan the dividing rock-partition is only some 6 to 8 inches thick. There is now a hole through it which is accidental, but it shows how near the hewers of the tomb were to breaking into the neighbouring sepulchre.

The tomb was found to have a repository in the left back or north-east corner. This had for the moment to remain unexcavated in order to avoid disturbance of the objects to be investigated on the divan. Its presence, however, was quite certain as there was a sinking of the deposits into it which allowed the top to appear. Above this also the rock is scooped out in the form of a shallow cave.

From the disposition of the objects on the back divan the tomb was seen to be as little disturbed as could be expected considering the custom of removing the belongings of earlier burials into the Repository. Indeed, it was difficult to see that there was any disturbance at all that was not the work of the proprietors of the tomb. As long as one can have part of a vase on the divan and the rest in the Repository, as was the case with the instance in Tomb 2, a certain amount of disturbance is obvious.

The grouping of the pottery (see Plan, Plate X, and photographs, Plates LI and LII) was exceptionally clear.

A large jar with extremely small ring base, and with a large bowl as lid, stood at the head of the left-hand divan, just as it was left by the owners.* About the middle of the same divan a group of nine lamps stood by themselves. A similar group of lamps stood at the left end of the third step down into the tomb, while a smaller group lay at the right end of the fourth step. Once more a group of six lamps lay on the floor at the inner end towards the middle. There can hardly be any doubt that these groups, consisting entirely of lamps, were in their original positions as they had been laid down from time to time after the ritual observances in which they performed an essential part.

All these groups have been marked on the Plan of the tomb by Mr. Newton.

* Plate LII.

THE POTTERY OF TOMB 8.

The principal types of pottery of Tomb 2 recur here, but the vases have an appearance of being, on the whole, a little later. This would agree with the fact, already noted, that our tomb must have been constructed after Tomb 7 and its Repository.

The typical black hand-polished juglet did not, so far as I have noted, occur in the tomb itself; there were, however, a few specimens of the variant with buff or brown clay slip.

The lamps, taken as a whole, looked decidedly later than those of Tomb 2. They showed a tendency to a higher cylindrical base with a resultant addition to the weight, emphatically angular contour and a somewhat exaggerated flare out of the lip, which all indicate a somewhat later phase in the development of the lamp.

In all this we are only considering such pottery as was visible in position on the divan and on the floor after the tomb was entirely cleared.

Let us now see what the pottery was like which occurred in the Repository.

This as it appeared on its removal from the Repository is shown in Plate LIII; the group to the right on the back divan, while the pottery from the tomb is on the left hand divan. The Repository itself is in the corner behind the figurine of a horse with rider.

POTTERY FROM THE REPOSITORY OF TOMB 8.

The later character of the pottery found in the Repository of Tomb 8, as compared with that found in the other Repositories, such as that of Tomb 2, was at once apparent.

If we keep in mind that the objects in the Repositories are always earlier than those found in position, we shall realize that the later character of the pottery found in the Repository of Tomb 8, means a somewhat later date for the tomb as a whole than we are justified in assuming for some of the others in this series.

The later dating seems to come out clearly in the group shown on Plate LIV. Here the characteristic water-decanter is already prominent. Seven whole specimens were counted, and of those, items "16," "19," "21" are three. There were, besides, other specimens present in fragments. Those vases show already on the outside the rills formed by rapid turning on the wheel.

These in course of time came to be affected as a fashion, and that this was so is shown by the fact that the ruddy smoothed clay surface, or slip, of the vase is polished by hand along the rills in such a way as to bring out and emphasize them. All three specimens shown illustrate this device quite clearly. Once it became the custom to have the polished rills, these could be indicated as a decorative matter of form quite independently of the real rills. Several of the water-decanter from our Repository show that this stage has been already reached in this tomb.

Of the black, hand-polished juglets, three specimens were noted, and of these two are shown (items "17," "20"). It seems evident that, by the time to which the tomb belongs, this type is becoming rare, especially when we bear in mind the quantities found in the Repository of Tomb 2. It is possible that it was being gradually ousted by the variety with a buff hand-polished slip. Of this variant with a light surface, three were noted as occurring on the divan of Tomb 8, and of these one is shown (Plate LVI, item "5"). The variety seems to have survived at Beth-shemesh to the very end of the Third Period.

The small type of decanter, of which one specimen from the divan of Tomb 8 is shown (Plate LVII, item "20"), occurs here (item "14"), with a fully developed ring base. The ring base is, however, an independent feature and its genesis has nothing to do with the special development of this type of vase. Item "14" does not on that account require to be later than the other two specimens from the same tomb. All three are more or less contemporary.

Of the saucer types from the Repository of Tomb 8, item "13" has a unique interest. It is inscribed with three Hebrew characters of the period before 700 B.C. (see Fig. 10). These were incised with a firm hand after the

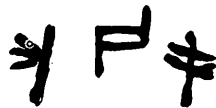


FIG. 10.

vase had been baked. This interesting piece of epigraphical evidence affords welcome confirmation of our independent conclusion that the divan tombs of the North-West Necropolis belong to the era of the Hebrew Monarchy, which we have called the Third Beth-shemesh Period. It is a curious coincidence that the last important tomb we had excavated at Beth-shemesh, and which

the previous year had yielded the important scaraboid inscribed seal shown in Plate LXI, item "1," and described below (p. 92), should later on have brought us this final bowl as a piece of epigraphical evidence from the Repository as to the chronology as a whole of the divan tombs of the North-West Necropolis.

"The letters on the plate appear to be ךחא , which might, of course, mean *thy brother*. If this inscription were later than it is, and it were possible to read אחא , we should have a name known to have been in use at Palmyra, and among the Jews of the Rabbinic period; but that the first and third letters are the same seems most improbable. The letters are not of the earliest type; on the other hand, the perpendicular strokes show no tendency to the curvature which is already marked in the Siloam inscription and commonly found in later inscriptions. We need not suppose that the letters were inscribed much, if at all, later than, if even so late as, *c.* 500 B.C."—G.B.G.

The ritual custom of dedicating figurines in these tombs receives further illustration in the Repository finds of Tomb 8. This is the terracotta of a horse with rider shown in Plate LIV, item "3," and on Plate LV.

The figurine has been set up from fragments, but is complete with the exception of the hands, part of the left ear of the horse and part of the round object on the left side of the horse's head. This object may be a simple representation of a shield, in which case the rider would represent a warrior or a god of battles. The face of the rider has almost the same bird-like rendering of the head as the figurines from Tomb 5 (Plate XLII).

POTTERY IN TOMB 8.

Typical examples of the pottery found in position in Tomb 8 are shown on Plate LVI. Forms that are now quite familiar to us recur, such as the water-decanter ("13"), the jugs with rounded base ("14," "19"), and their later variant with almost entirely flattened base ("3"). The juglet types ("5," "21") are also there as well as different varieties of bowls and saucers ("6-10"). One or two variant types of jugs are so new as to seem to be late incomers. Item "1" is in this respect so novel with its ridiculous pinched flowing spout as almost to appear a freak. The water-decanter (item "11") has a shape widening above, towards the shoulder, which is typologically unique in these tombs.

The smaller decanter or jug-type (item "15") occurred in Tomb 6, but with a rounded base. Here the base is somewhat flattened, the contour below

is less bulging and the form as a whole is thus more elegant. The type is certainly a late comer, just appearing as these tombs were closed for the last time. A second specimen showed an entirely flattened base.

The baby's rattle (item " 17 ") was found to occur only this once in these tombs but we are already familiar with it from Tomb 1. A baby's rattle is so often found as in this case to survive the baby itself, that we need not be surprised to see it turning up once more, and this example is certainly reminiscent of that earlier time to which belongs Tomb 1.

Last, but not least, comes the store-jar shown on Plate LVIII and in Plate LII, where and on the Plan its position is indicated at the head of the left-hand divan. The use of the bowl as a lid is a common household practice. There were bones in the bowl and in the bottom of the jar. Such bones, very much crumbled away, were commonly found in the vases. Sometimes they were of very small children and it is likely they were put by in the vases when room had to be made for later burials. In most of the cases it was only a few of such bones that were so found. It was a common thing to find remains of the skull in a bowl. But they were in all cases very much crumbled away, and this may probably be attributed to the action of the limestone in the rock of which the tombs are composed.

The jar it will be seen from its size and shape is of a different type to that from Tomb 2, which was probably identical with the pitchers used in those times for carrying water from the well. This store-jar was meant to be stationary in the house, and it could contain water or wine or olive oil for gradual consumption.* The four handles on the shoulder are quite characteristic for store-jars of this period and from these they seem to have passed to a type of jar which is identical with the water-pitcher referred to above. In the latter part of the Third Period the handles seem to become more common for jars of the water-pitcher type, but for these they are superfluous. The diminutive ring-base is absurdly small for the size of the jar, but it is always recurring. The rills formed on the outside by the rapid turning of the wheel are very strongly marked, and they are so common at this time as to seem shown on purpose. As there is hardly ever a trace of paint decoration, this was one of the ways in which the potter could give a certain free play to fancy.

* Store-jars of this kind were actually found in position with their bases sunk into the plaster floors of houses of the Third Period at Beth-shemesh.

SMALL FINDS FROM THE REPOSITORY OF TOMB 8.

We take the objects from the Repository before those from the tomb itself in order, as in the case of the pottery, to note any sequence that may come out. But vases, on account of their size, are not so easily overlooked as are small objects, and it is quite possible that a good many objects which we found underlying silt and other deposit on the divans ought to have been in the Repository. For this reason while we can say that any object found in the Repository is in its proper place and context we cannot affirm so much of any small find from the divan. The two sets have simply to be kept rigidly separate.

Of the objects shown in Plate LIX, A, all seem to be female ornaments, and all are in bronze except the faïence beads (item "20"), which are so much corroded with bronze that they were at first taken to be such.

We have already made the observation that the Repository of Tomb 8 contained pottery of a type which showed that this tomb, as a whole, was of comparatively late date in the series. The five earrings with drops (items "11-15") would seem similarly to show that these are by now quite the fashion. Items "7," "8," "9," are earrings of the type thickened below. These also did not occur in Tomb 1. The rings uniformly thick all round are probably for the finger. The bracelet (item "19"), the fibula, "18"; the fibula pin, "21"; and the pins below, "22," "23," go with the earrings to indicate that several women were buried in this tomb.

Plate LIX, B, shows us (item "1") a large ring in silver. Items "2-8" are arrow-heads and fragments of such in iron. They are all of the leaf type and the material is a further indication of the comparatively late period in the series to which the tomb belongs.

Of the items shown on Plate LX, A, the shell ring (item "1") is so rare as almost to have a unique character but it recurs at Beth-shemesh on occasion.* The material was probably prized as an amulet. Items "2" and "3" are plain scaraboid beads in ivory and their very plainness may indicate that the material was conceived to have apotropaic virtues. The much decayed ivory object (item "5") was noticed only this once in the chamber tombs; but a slightly variant club type was very common in Tomb 1.† The small silver or

* See for example Plate XIII, A, item "11."

† See Plate XXX, B.

electrum button of modern type (item "8") was quite unique, having been noticed only this once. The two small beads, "10" and "11" (this fragmented), are in pale amethyst, a material that is rare in the tombs. There was only one further instance of its occurrence, and this was in the East Grotto.* The occurrence may be noted of the carnelian beads (item "12"), the faïence beads "13," "4," and among the spindle whorls at the bottom one (item "17") in dark Phœnician glass with an orange coloured border below, the other two whorls being in some kind of schisty stone.

SMALL FINDS FROM THE CHAMBER OF TOMB 8.

Of the objects found in the tomb, as distinguished from the Repository, Plates LX, B, and LXI are examples. The finds in bronze of Plate LXI, among familiar objects such as the earring with drop or thickened below indicative of female sepulture, and arrow-heads such as items "36," "37," "38," "39," "41" equally indicative of the presence of the male, show one or two objects that are unique or almost so. The bronze tube, item "35," with collar in a separate piece at either end (at one end gone) was not observed in any other of the tombs. The bronze disc (item "40") is bored at least twice near the edge as if meant to be stitched on to some dress. The only other ornament we noticed like this was a fragmentary disc of the same kind found in the East Grotto.

Of the beads in miscellaneous materials (items "1-16") one is of exceptional importance. This is the scaraboid bead seal, in brown-coloured porphyry-like stone, which is put as item "1." This has incised on it a Hebrew inscription in a character which puts it at once into the period before 700 B.C. to which for independent reasons we have assigned these chamber tombs.

Interpretation of scaraboid bead seal with Hebrew inscription.

"The legend on the seal consists of two names separated from one another by a double line. The top line contains four letters: the second and third are clearly ן and ם, the fourth can scarcely be anything but ן, though the form is unique and the resulting name unknown and extraordinary.† The first letter is not clear: we should expect ל what we actually have is, perhaps, a

* See Plate XIII, B, item "9."

† It is tempting to read the top line לִחְסֵה, *belonging to Hoseh (the son of)*: and, as reproduced in Fig. 11, the third letter may seem to resemble a very early ם rather than a later ם; but in the photograph, on which these notes were based, neither any left-hand extension of the second horizontal stroke, nor any part of a third horizontal stroke is present.

ל superimposed on a י. On the bottom line the first three letters are clearly בער: what remains consists, perhaps, of two letters (אל) rather than one (an ill-formed ר). If the first suggestion is correct, the name is בעדאל:

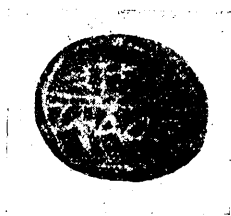


FIG. '11.'

this would be new, but entirely parallel to בעדיה which occurs in the Elephantine papyri, and which Dr. Cowley has compared with Yaubi'di, the name of a king of Hamath, in the eighth century B.C.; בעדאל would be parallel to that king's alternative name, Ilubi'di. If the line contains but four letters, the first (ב) would be a prefix, as in the Biblical name בדקר, Bidkar.

"Provisionally, then, we may read, marking uncertain letters with dots—

לחאה
בעדאל

"The writing (note especially the נ) represents a later development than that on the Moabite stone or the Gezer calendar inscription; whether it can safely be assigned to so early a date as 700 B.C. will turn partly on the date assigned to the Siloam inscription."—G.B.G.

The discovery of this inscribed seal itself puts a fitting finish to our labours in the North-West Necropolis. Such seals can, as a rule, be relied upon to belong to some person who has the right to use them. They are given to the person when he is laid to rest, and they are not usually employed like amulets which for magical purposes repeat names of persons who were dead perhaps for centuries before the amulet was manufactured. Thus they afford chronological evidence which, as in this case, may be of the highest value in clinching conclusions of a general and sometimes hypothetical character from the other archæological data. From this point of view it was the happiest of chances that an ordinary inscribed bowl (that could not have been stored up as an heirloom for centuries) should have been found in the Repository of this very tomb. The character of the letters on the bowl is so much like that of those on the seal that both must belong to the same general period before 700 B.C. if they are not exactly contemporary.

PALESTINE EXPLORATION FUND.

THE EXCAVATIONS AT AIN SHEMS.

DECEMBER, 1912.

READERS of the *Quarterly Statement* for October who were interested in the progress of the excavations at Ain Shems would have regretted the closing down of the work, in July last, for lack of funds. This was all the more tantalizing as it came just at the moment when Old Beth-shemesh was beginning to reveal her secret. None interested could have deplored this untoward condition of things more than the excavators themselves. The situation was further seriously aggravated through the illness of Mr. F. G. Newton, followed by the collapse, through severe fever, of our foreman of works, Jusuf Kanaan. The hot summer season, which is an unhealthy one at Ain Shems, was also now upon us, and as long as this lasted there was nothing to be done except to set about the study of the results already attained, in view of their publication.

It was in these circumstances that, as in the vacation of the previous year I undertook the journey to Athens with a view to preparatory study of results at the archæological libraries there.

Just at the close of my stay at Athens I had the unusual pleasure to meet by pure chance a gentleman who happened to be deeply interested in the history and fortunes of the Holy Land, and who, in an interview he afterwards requested of me, indicated his anxiety to be informed as to the latest news of work at Ain Shems. The result was a generous donation of £100 towards the further exploration of the High Place at Beth-shemesh. The gift was as unexpected as it was spontaneous, and indeed the donor, who was himself travelling to Palestine accompanied by his wife, had only come by way of Athens because the outbreak of war in the Balkan States had seemed to make the journey to Constantinople by way of Sofia not quite opportune. The détour by way of Athens brought us together, by a fortunate coincidence, at the same hotel, and the chance which, in this way, led to our meeting happened to come at a moment when any prospect of a proper conclusion to our work at Beth-shemesh seemed entirely out of the question. It was, perhaps, in

keeping with so unusual an experience that the donor should prefer to veil his identity.

It was by a further strange chance that the donor himself turned up at Beth-shemesh just on the eve of the new campaign. Nothing had been pre-arranged, and even a message sent in advance by telegram from a town not far distant in the land was destined to arrive several hours behind our guest himself, and it fortunately happened that on his arrival, he could at once be shown and have explained to him the purpose of the new campaign. This involved a descent into the cave beneath the High Place, for we were to begin where we had left off in July, with the excavation of subterranean Beth-shemesh.

It is with this that our summary account should begin. We shall thus preserve the order of history, not reversing that, as one is usually compelled to do in excavation itself, through the necessity of beginning from the surface downwards. Here we were not beginning at the surface but with the High Place Grotto, and with this we were at the very dawn of history at Beth-shemesh.

From the previous Report it will be seen that we were hardly able to do more than have a peep at the mysteries of this cave when it had to be closed again for want of the financial support which could have enabled us to go on with its exploration.

How much this was to be deplored could be seen from the interest and fruitfulness of the results brought out in the new excavations.

Over sixty vases, most of them intact, were recovered from the cave, and these exhibited types which could be seen at once, from their associations, to represent the earliest period of history at Beth-shemesh. Among the vases represented was the type of water-jar with two handles on the shoulder which henceforth has a continuous history at Beth-shemesh, and in the period of the Kings, indeed, has the peculiar added interest that it frequently bears stamped handles which throw a rare and welcome light on the history of Hebrew writing in the days of its prime. The water-pitchers from the grotto are, however, much earlier than the era of the Kings and go back to a time when stories like those in Genesis about Rebekah and Rachel at the well give a far-off idyllic note to Sacred History. A similar water-jar was found in Tomb 2 of the North-West Necropolis which, as far as these chamber-tombs are concerned, may be taken to belong to the period of the Kings. Both vases, with their companions, are illustrated in the present volume of the *Annual*

(Plates XIV, XVII, and XXXVII), and it is thus possible, from comparison, to see that the type in its earlier form is much superior to the later. The piriform contour is more elegant and the handles especially are much better adapted to the general form than they are in the case of the later variety of the type.

Among the vases that occurred in the grotto were some jugs that likewise play their rôle in the time-honoured usage about wells in the East. These jugs are quite like our modern ewers with one handle and a narrowed neck. In course of time these come to have their rim pinched out opposite the handle, to form a pouring spout.

Those from the High Place Grotto have not this pinched-out rim, but they appear to be current at a somewhat later period. At least, one example turned up in the East Grotto, which is outside the City Walls, and here by a curious coincidence the evidence that these jugs were used in connection with drawing water from the wells emerged in a somewhat humorous form. Among the ceramic finds from the East Grotto was the model of a water-donkey, and a jug of this kind (with the pinch-spout) is here seen strapped on alongside of a water-jar like that from the High Place Grotto referred to already. The modelled vessels are painted in matt red and black, which have Philistine associations ; and, as if to show that this use of paint was no mere whim of the modeller artist, fragments of a real water-jar with the same sort of black and red matt paint were found in the environment of the South Gate in circumstances which might very well mean that it had been thrown down in sudden fright by some fair maid of Beth-shemesh just as she was bringing in water from the well.

Equal in distinction of form to these jars and jugs were the vessels of bowl or saucer type. These occurred in such quantities that they may be regarded as characteristic of this early period at Beth-shemesh. Along with these was a type of juglet of piriform shape ending in a point at the base which has as long a history at Beth-shemesh as the water jar. But they equally lose in elegance as time goes on, and collusion probably with a baggy shape of small jug that is very common at Beth-shemesh makes them taper towards the shoulder instead of below, and this is the type that is most common in the Israelite Period and later.

It is interesting to note that the most beautiful series of vases from Gezer belonged to the same early period as those from the High Place Grotto at Beth-shemesh.

At Gezer, Professor Macalister found, in the same company as the vases, an early type of terracotta saucer lamp with slightly pinched wick-spout, which was entirely absent from the Beth-shemesh grotto.

Here, apparently, such lamps had not as yet penetrated into funerary ritual usage, whereas a little later it would seem that they became quite customary in connection with every kind of sepulture. In the East Grotto they occurred in numbers (Plate XX, items "1" and "5"); in Tomb 1 of the North-West Necropolis, which belongs to the pre-Israelite period, they are perhaps the most current type of clay utensil (Plate XXV); while in the chamber tombs of the period of the Dual Monarchy they are the one ritual object that must on no account be lacking. They were lit at funerary celebrations in the tomb and left there when the rites were over.

An important question that is naturally raised through the discovery of tombs within city areas is that as to their intramural character.

Did Beth-shemesh really have city walls at the period to which the High Place Grotto belongs? There is some reason to think it had not. Once such walls were set up it would be felt to be no longer convenient to bury within. The East Grotto is outside the fortifications and it probably belongs to the time immediately succeeding the building of the Strong Wall of the city; while the High Place Grotto, rather than being an instance of intramural sepulture, more probably belonged to the somewhat earlier period immediately preceding the erection of the fortifications. The building of the City Wall was possibly the event which led to the closing of the grotto for the last time.

But the High Place Grotto was not the only instance of sepulture within the city area which could not, without further question, be called "intramural" burial.

There were also chamber tombs of an imposing character, and one of these had already been found in the High Place Area itself. The complete explanation of this brought out the curious fact that, while apparently these tombs could not be conveniently used for burial after the building of the city walls, they could be put to other uses. The underground chamber just to west of the High Place gave every indication of having been emptied of its sepulchral contents and remodelled into a cistern. For this purpose it was evidently enlarged and deepened and its interior covered with a coating of cement.

This discovery proved a momentary disappointment, but it was

archæologically an extremely interesting one as throwing its own ray of light on the transformation which the city had to undergo in its internal arrangements when once it came to be enclosed within the confines of strong walls. This transformation involved a crowding together of the habitations, which did not allow of any free areas within for the burial of the dead. The very tombs themselves of the previous period were built over and thus entirely forgotten when, as in the case of the underground chamber beneath the High Place, they could not be transformed to new uses. The change from an unwallled to a wallled city apparently took place towards the end of what we have called the First Beth-shemesh Period. It was then that the High Place Grotto got covered up and forgotten, and the people of Beth-shemesh began to bury their dead exclusively without the confines of the city.

By the time of the XVIIIth Dynasty in Egypt, to which the earlier objects from the East Grotto belong, Beth-shemesh was apparently already a fortified city. It was towards the end of this great era that what we have called the First Beth-shemesh Period came to a close.

This culminating phase of the earliest culture at Beth-shemesh could be seen from other indications to have been one of great building operations. From the beginning house-architecture was apparently in sun-dried bricks, but the stone foundations to these are much more solid and massive at the period contemporary with the building of the city walls than at any later era. One sees in their construction the touch, as it were, of the same people who constructed the fortifications themselves. These were also built up in sun-dried brick above like the walls of Jericho. No further use was made at this or any later period in the history of Beth-shemesh of the rich limestone quarries of the district.

The work of our new campaign was not merely supplementary to what had been done in the past summer, it opened up new ground as well. This was to north and east of the High Place Area. An extension of work northward enabled us to join the trench of the High Place Area to that which lay further in this direction, which we have called from its central position the "Central City Area." The rising region east of all this again seemed to us, relatively, of more importance than the ground falling to west in the direction of the outlying city walls.

The principal discovery in the east direction fitted in well with the historical sequence. This was an underground chamber like that of the High Place and, like that, probably a tomb of an earlier period, which on the

construction of the city walls had been later converted into a cistern. A large circular chamber, cut in the rock, had been provided with four massive rock pilasters projecting into the interior and meant to give greater solidity to the ceiling. The intervals between these pilasters below seemed to have been taken up by divan arrangements, found in all, for the repose of the dead. These were later hewn away and the whole chamber deepened on the conversion of the tomb into a cistern.

This cistern was apparently in use during the greater part of the Middle Period, and it is to this period that the finds from it must be referred. Unlike the other underground chamber, west of the High Place, the new one yielded an important series of whole vases, the most interesting and frequent type being one with strainer spout and basket or pail handle, which up till now had been unrepresented at Beth-shemesh. They are likely to remain unique for some time; nothing of the kind seems to have been found at Gezer, which has otherwise been so remarkably rich in ceramic finds of this Second Period.*

The *situla* type of these curious vessels seems still reminiscent of the waning influence of Egypt after the era of the XVIIIth Dynasty, while the "strainer" spouts may go, along with other indications, such as the use of paint in ceramic art, to point to the advancing power of the Philistines in the land.

A strange find from a cistern was a fine bronze axe, which is published in our group with the vases (Plate XIV, item "7"). It may have gone astray at the time when the tomb was widened and deepened to convert it into a cistern.

Such axes may by this time have been made on the spot, and here again it is as yet hard to say whether the smelting of bronze was first learned directly from the Egyptians or from the Philistines. It is, at any rate, possible that an art which the Canaanites had practised long before may have had to be learned anew by the Israelites in Egypt or out of it.

That, however, the manufacture of bronze weapons was, at any rate, practised on the spot somewhat later now became abundantly clear. In this same environment, but in the Israelite stratum, were discovered the fragments of a clay crucible with pinch-spout with the remains of smelted bronze still adhering to it. In the same spot were found what I took to be the fragments

* The Second Beth-shemesh Period corresponds with the Third at Gezer.

of a forge-bellows spout, in clay, such as are still in use in the East, either as such or as protecting caps for bellows-spouts of metal.

The Israelite or Third Period is the era about which there is fullest knowledge at Beth-shemesh, and this we owe to the discoveries made in 1911 in the chamber tombs of the North-West Necropolis.

The new excavations proved to be of the greatest help in throwing light on the obscurer periods which preceded this, especially as we have seen in the earlier parts of the First and Second Periods. There is no doubt now that the finds from the High Place Grotto are earlier as a whole than those from the East Grotto and that the objects from the circular cistern of the new excavations are earlier than those from Tomb 1 of the North-West Necropolis.

We had found out already that in the Israelite Period Beth-shemesh had been deprived of its fortifications and that it was destined to be henceforth an unfenced city of Judah ; but it was only now that we could conjecture that it was equally an unfenced city in the earliest period of its history.

In the Middle Period, when Beth-shemesh was a fortified city, the risk of always having to depend on cistern water was sure to be felt. The city well, discovered in the summer, must have been of the greatest importance in this era. It was probably then that the well was sunk. The later explorations here brought out the fact that the boring for the well had gone down to an enormous depth before water was reached.

It remained in use till the end, and a reminiscence of the existence of an ancient well on the spot may explain the name of Ain Shems for a part of the locality.

We got down 20 metres (65 feet) without any indication that we were at all near the water level, and it is probable that this has retired considerably since early days.

We have already attributed the destruction of Beth-shemesh to Sennacherib and his army while they were on their way to Lachish. But the site was reoccupied for a time after that era.

The reoccupiers were hardly more than squatters, who apparently had an interest in the olive oil industry in a district that must always have been rich in olive-groves to judge by the wealth of these even in our days.

Interesting evidence of this industry came to light in our excavations in the region immediately to north of the High Place Grotto. Here, almost on scraping the surface, a whole apparatus connected with the manufacture and refining of olive oil was exposed to view.

There were three stone presses with a stone vat between two of these which was evidently meant as a tub to hold water on which to float the oil in the process of refining. Several earthenware jars were found of a type which had previously puzzled us on account of their resemblance to a terracotta bee-hive. Such vessels, whole, or in fragments, have turned up at other sites in Palestine, but no explanation was forthcoming of their use (Plate XIX). Inside two of these curious vessels was found a juglet that is common in all periods at Beth-shemesh, and we could now see that the juglets had been used for ladling olive oil from the jars. A rough experiment showed that these juglets were probably used as measures and that the oil may have been measured for sale on the spot.

Vases of the same type as these oil-jars had been previously discovered hoarded up in a disused cistern in the region of the North-West Necropolis, but only now did we have a full explanation of their use.

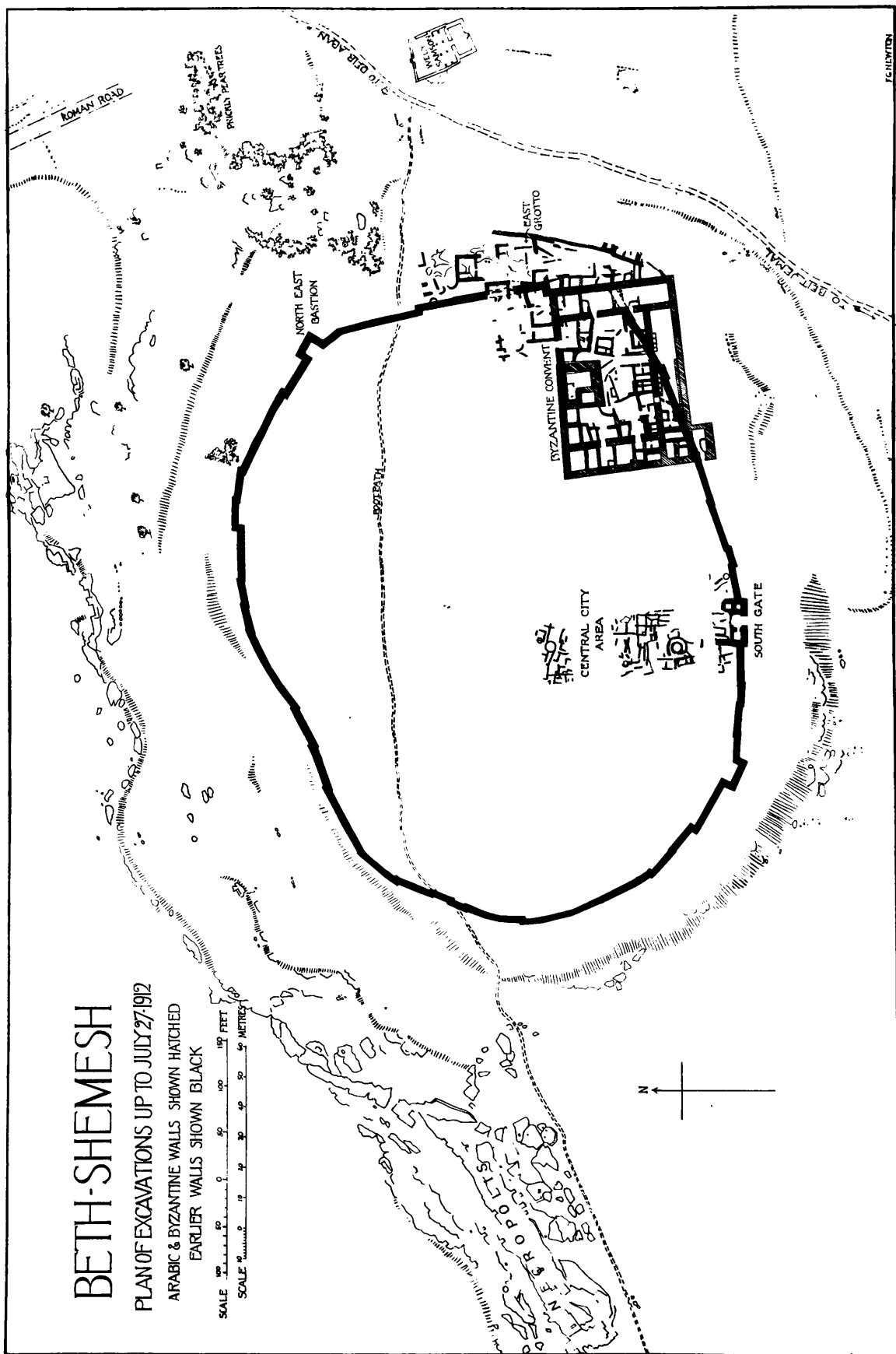
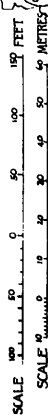
A final surprise was prepared for us in the course of some supplementary work in the region of the South Gate. This gate turned out to be of much larger proportions than we had previously imagined, and those visitors to the site who know the country well have since declared that the South Gate of Beth-shemesh now takes its place as one of the finest monuments of its kind in Palestine.

In the absence of Mr. Newton, it was fortunate for the efficient progress of the work that before the end the new results could be put on paper and fitted on to the previous plans through the unexpected help of Mr. Beaumont of the American Colony at Jerusalem.

DUNCAN MACKENZIE.

PLAN OF EXCAVATIONS UP TO JULY 27, 1912

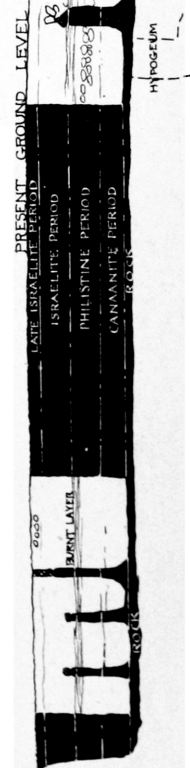
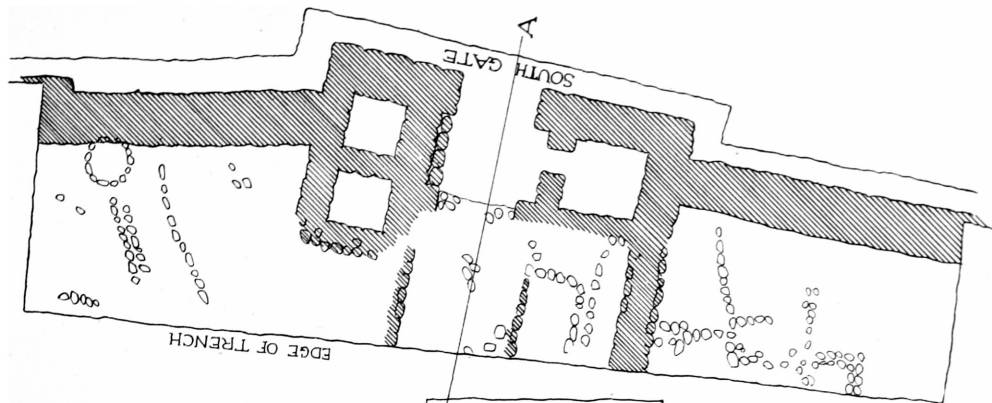
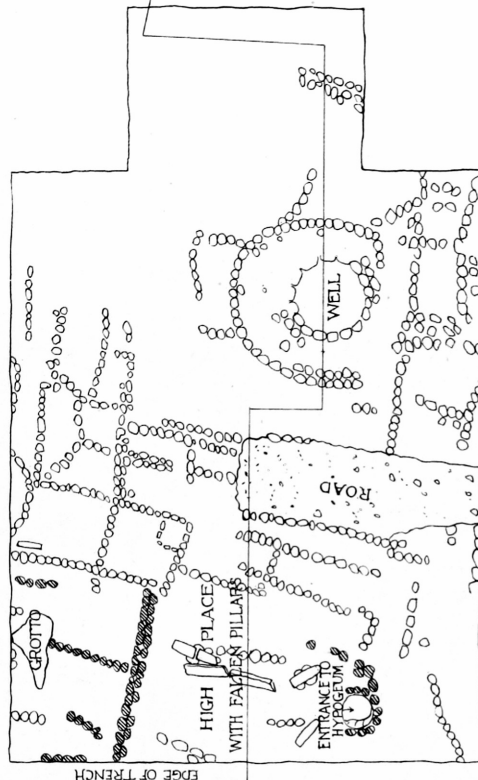
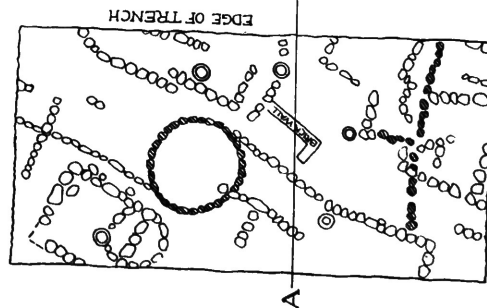
ARABIC & BYZANTINE WALLS SHOWN HATCHED
EARLIER WALLS SHOWN BLACK



PLAN & SECTION OF EXCAVATIONS IN CENTRAL CITY AREA

WALLS & STONES OF THE ISRAELITE PERIOD ARE SHOWN ON THE PLAN IN OUTLINE. EARLIER WALLS & STONES ARE HATCHED THE UNEXCAVATED EARTH IN THE SECTION IS SHOWN IN BLACK THE WALLS APPEARING IN SECTION ARE CROSS-HATCHED

SCALE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 METRES
10 20 30 40 50 FEET

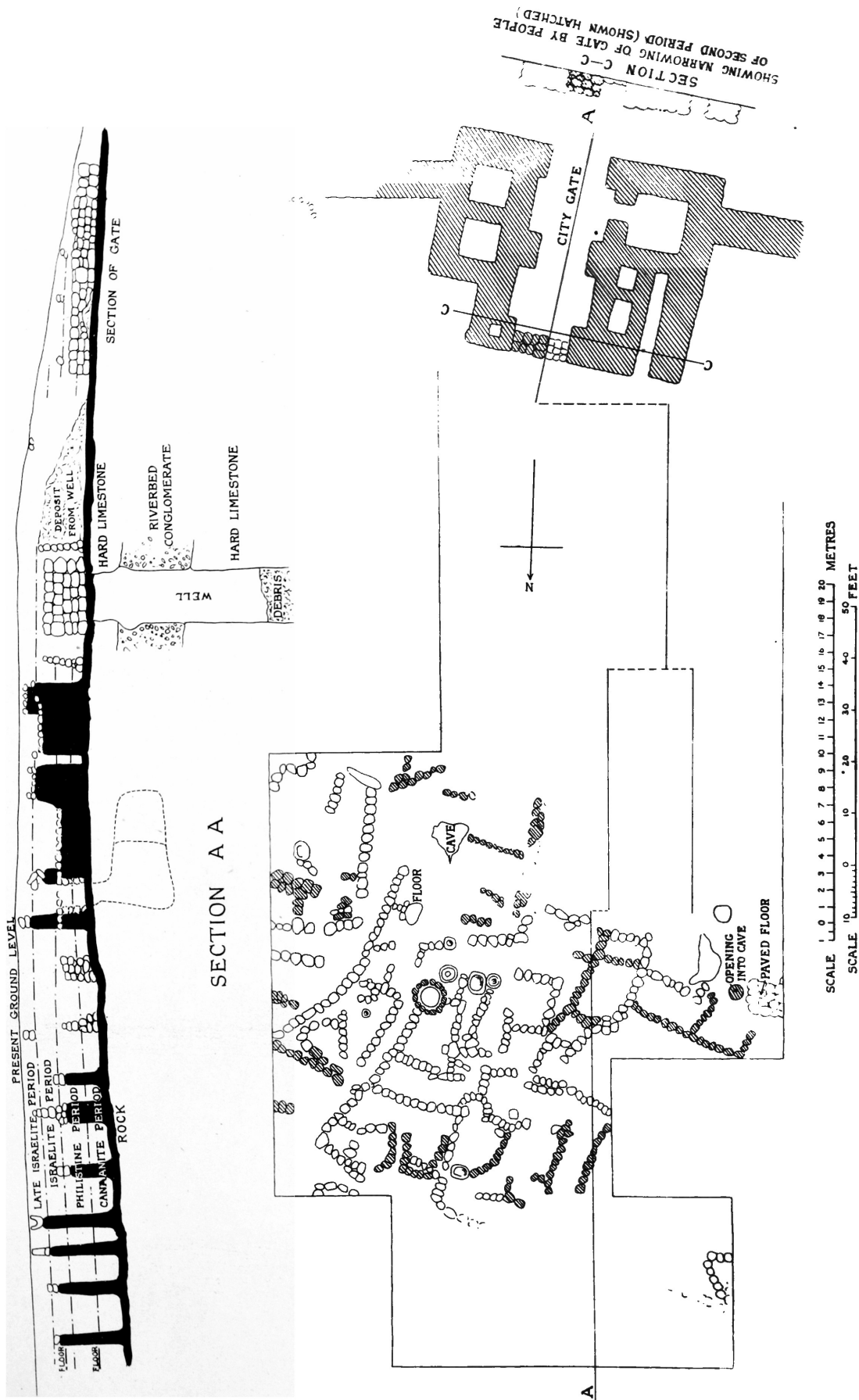


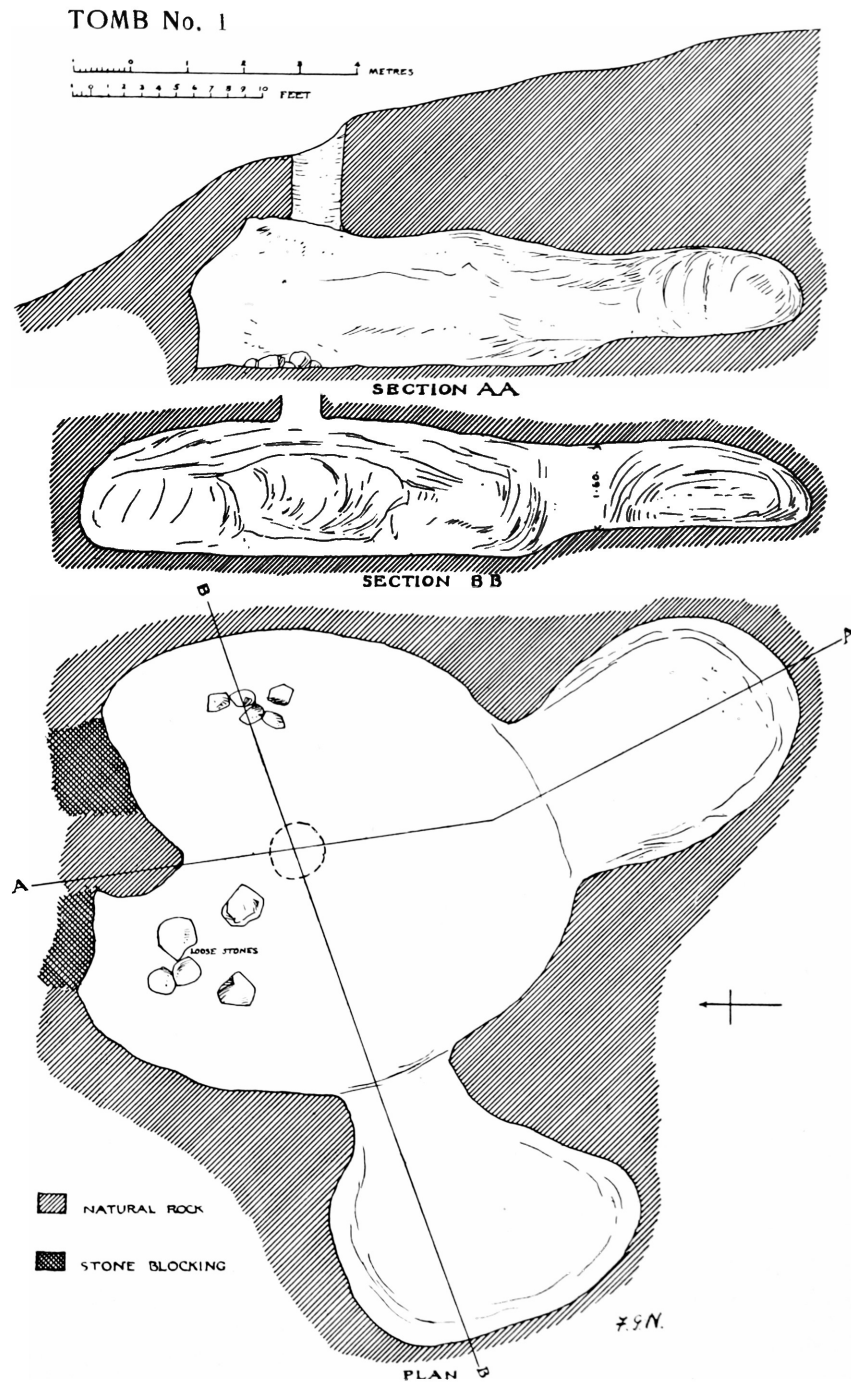
SECTION AA

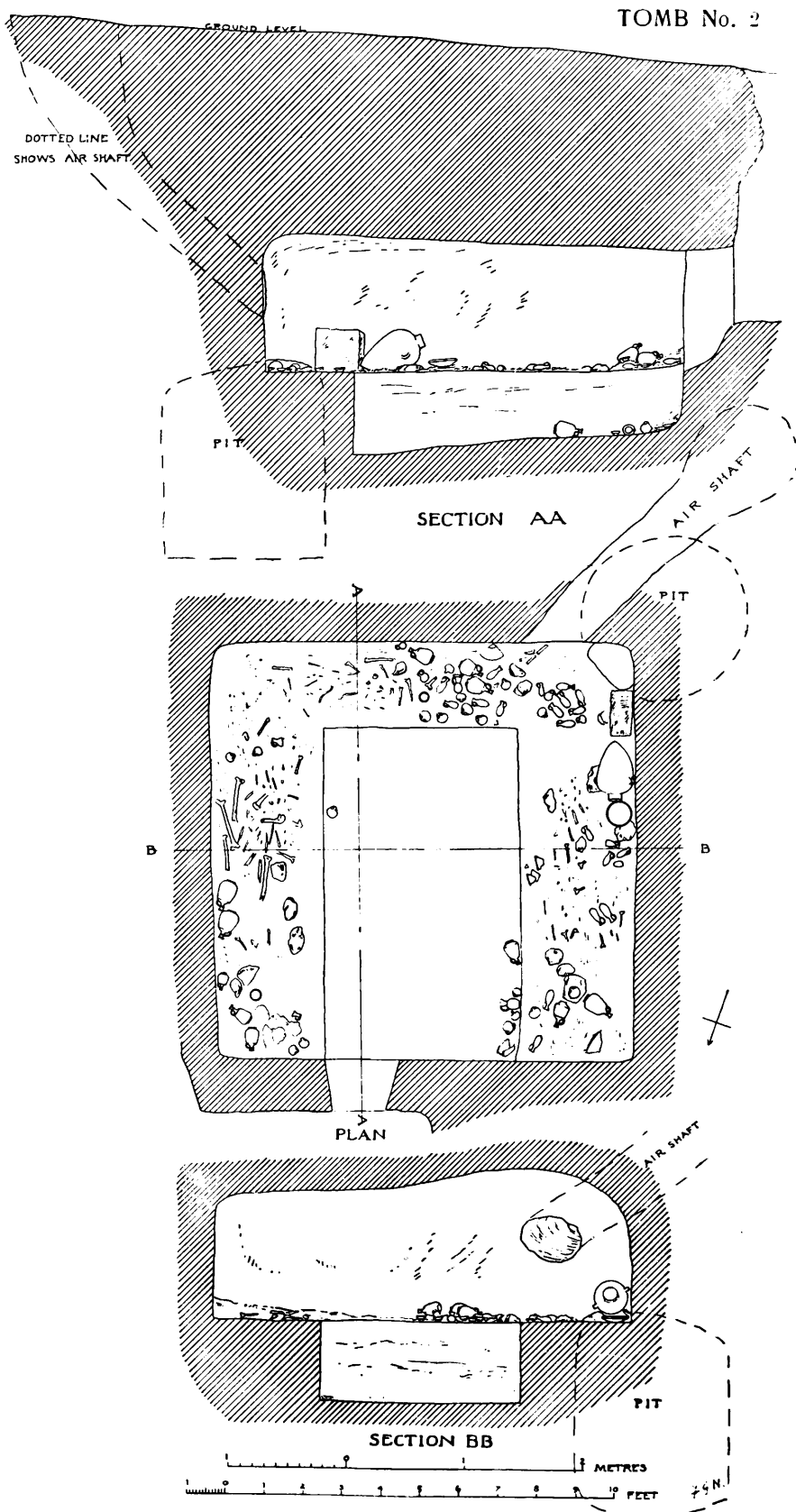
74 Nov 1912

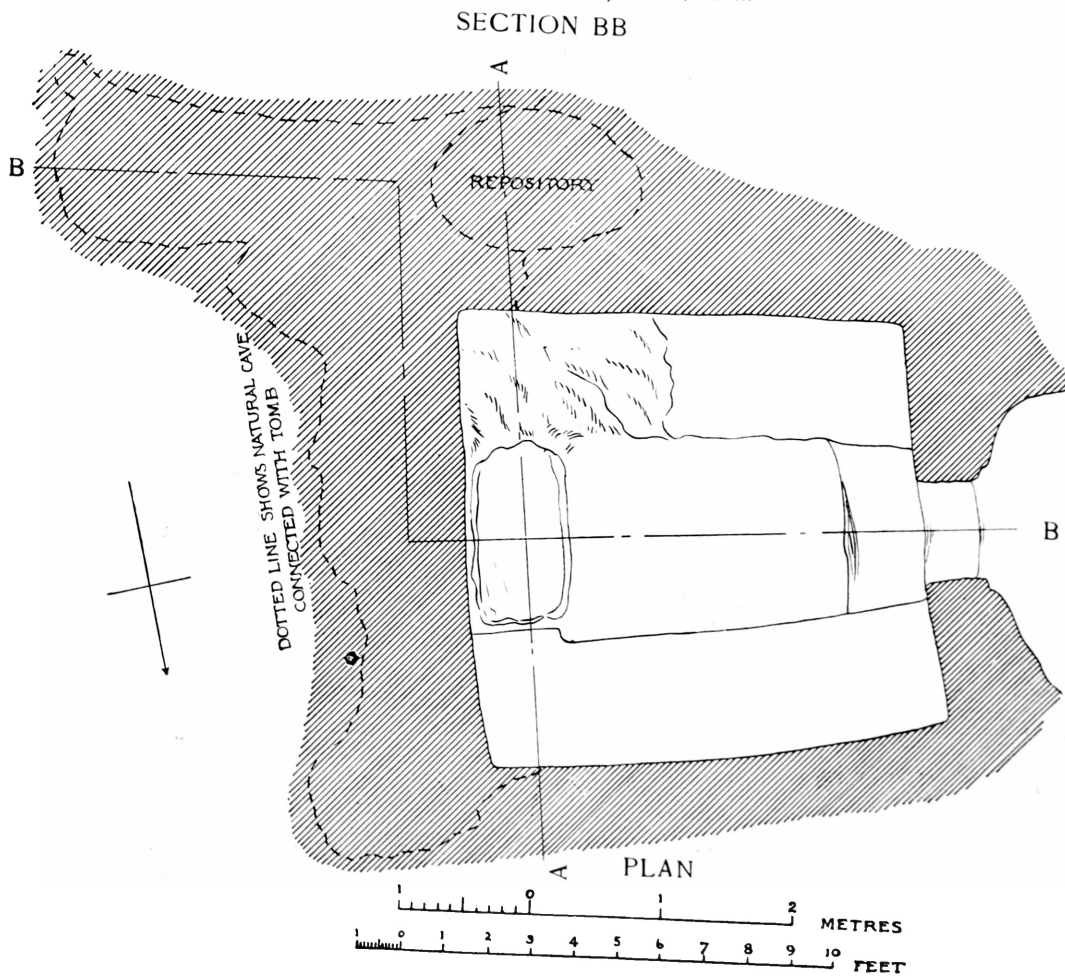
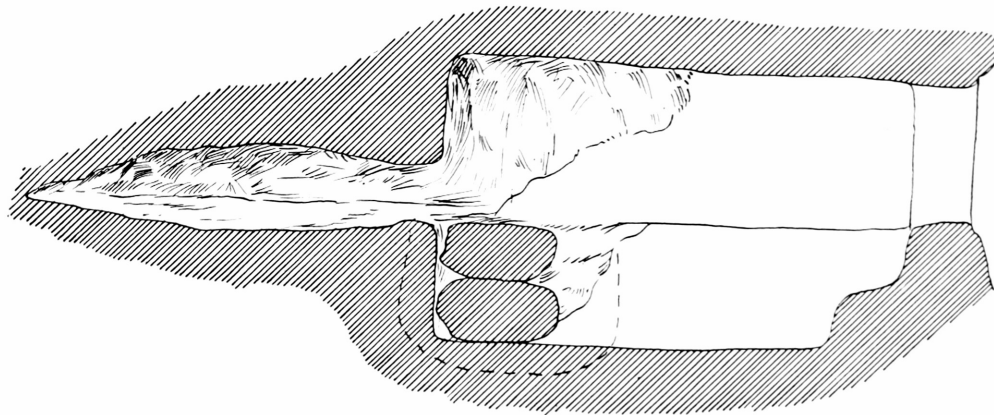
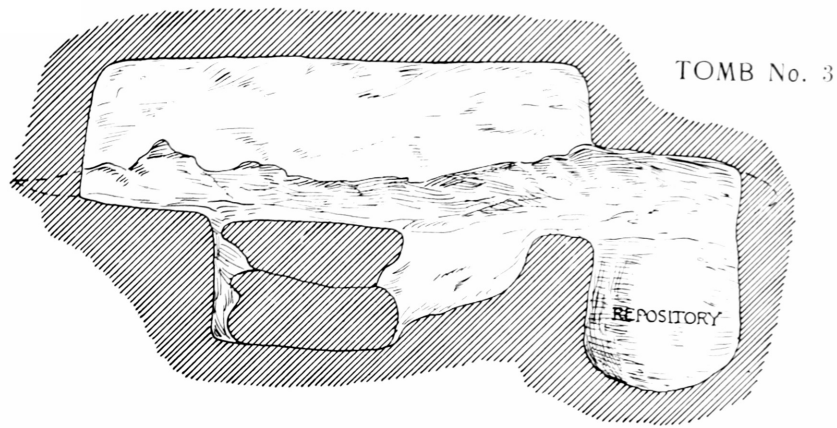
PLAN & SECTION OF EXCAVATIONS IN CENTRAL CITY AREA
DECEMBER 1912.

WALLS & STONES OF THE ISRAELITE PERIOD ARE SHOWN ON
THE PLAN IN OUTLINE. EARLIER WALLS & STONES ARE HATCHED
THE UNEXCAVATED EARTH IN THE SECTION IS SHOWN IN BLACK



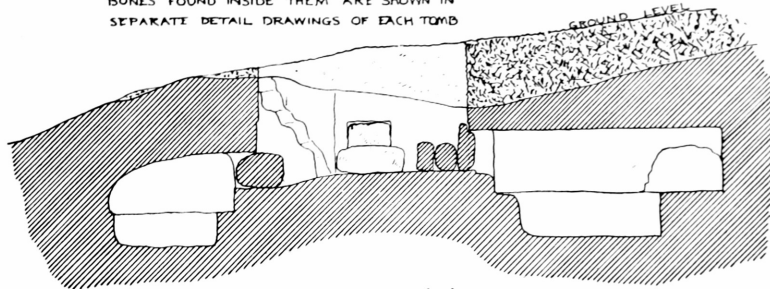




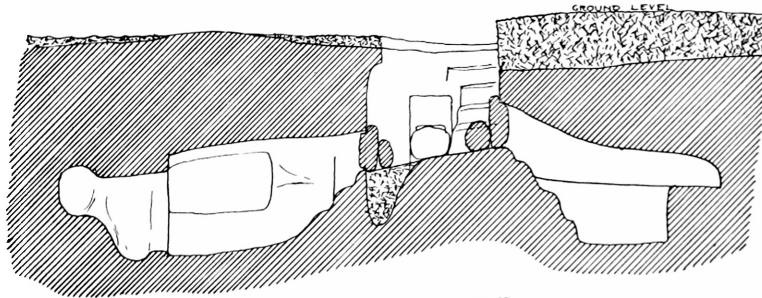


GROUP OF TOMBS Nos. 5, 6, 7, 8, 9

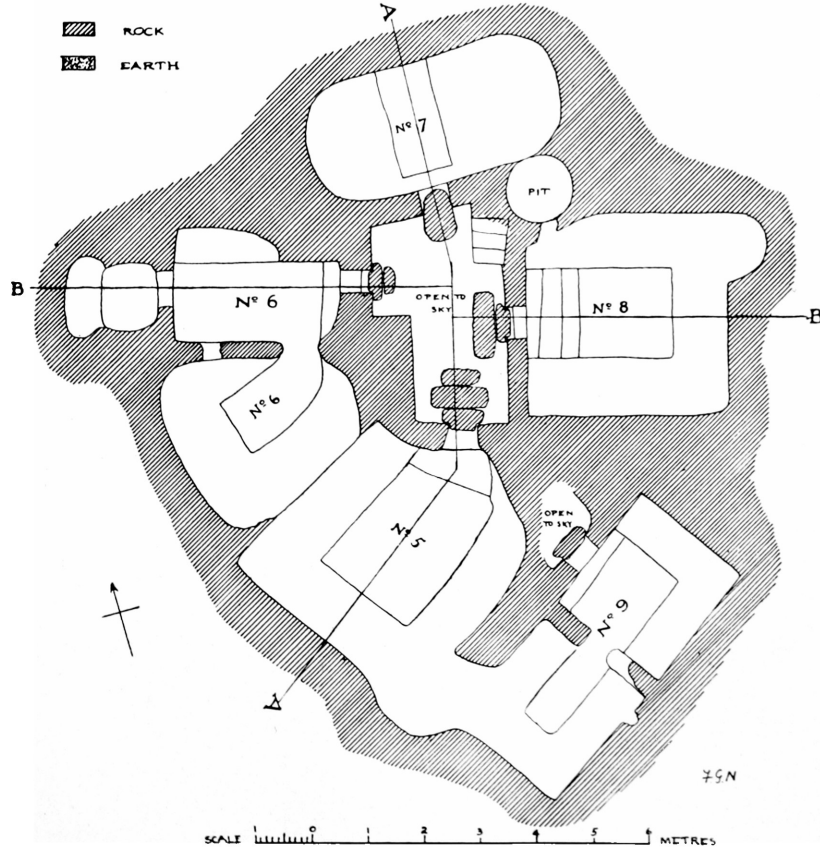
THIS DRAWING SHOWS THE RELATIVE POSITIONS OF THE TOMBS IN THIS GROUP. THE POTTERY & BONES FOUND INSIDE THEM ARE SHOWN IN SEPARATE DETAIL DRAWINGS OF EACH TOMB



SECTION A A



SECTION B B

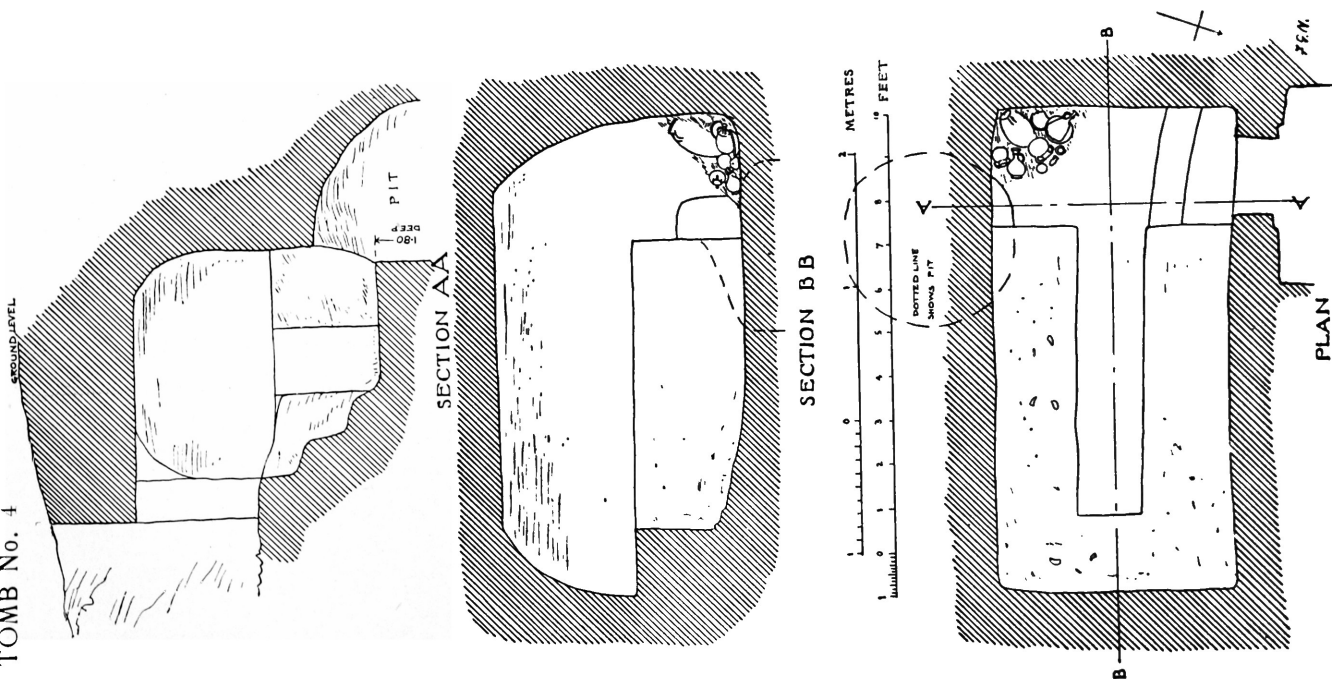


SCALE 0 1 2 3 4 5 METRES
SCALE 0 1 2 3 4 5 6 7 8 9 10 20 FEET

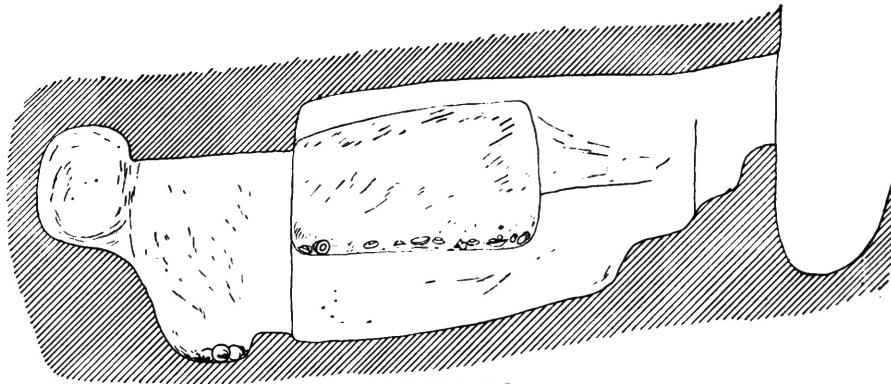
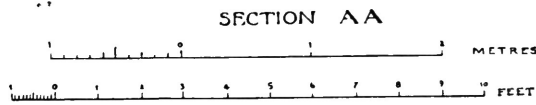
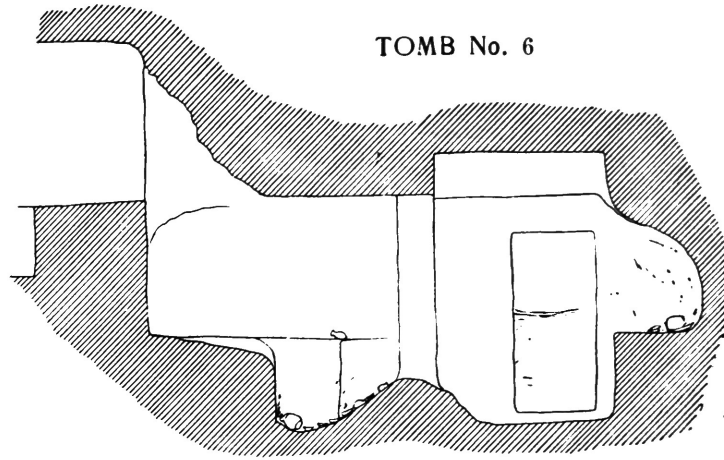
TOMB No. 5



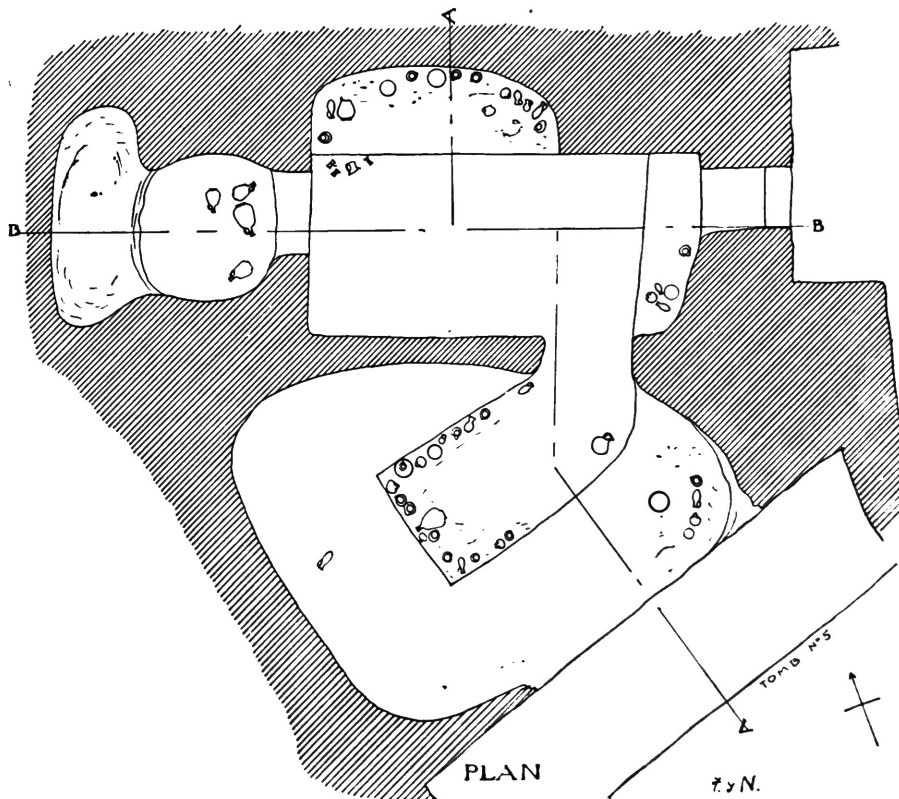
TOMB No. 4

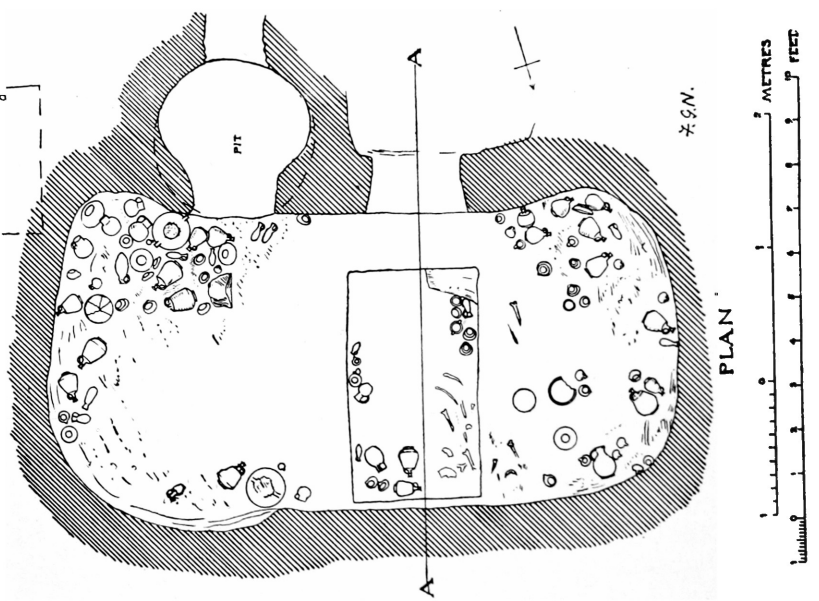
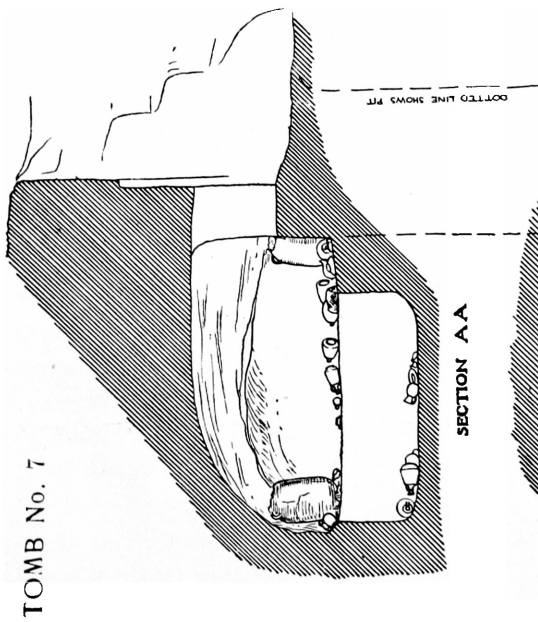


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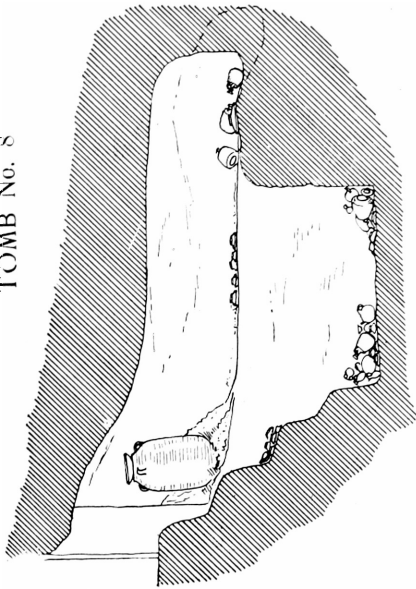


SECTION BB

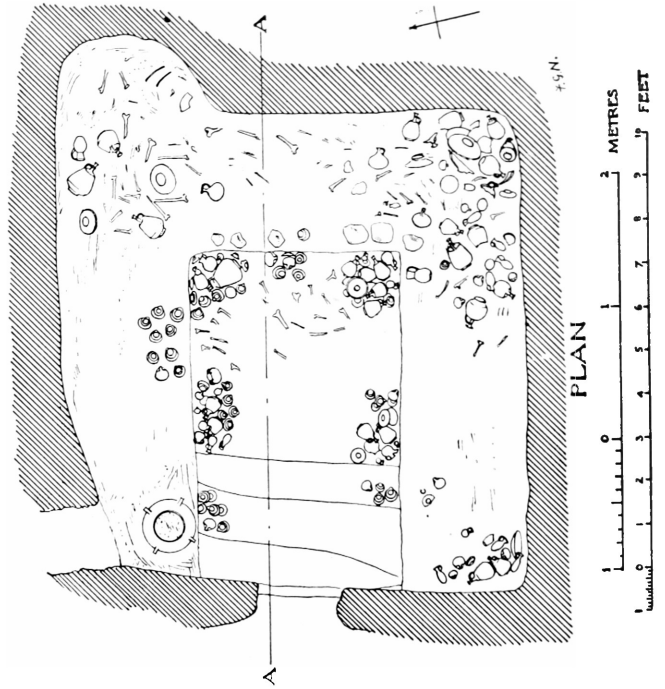




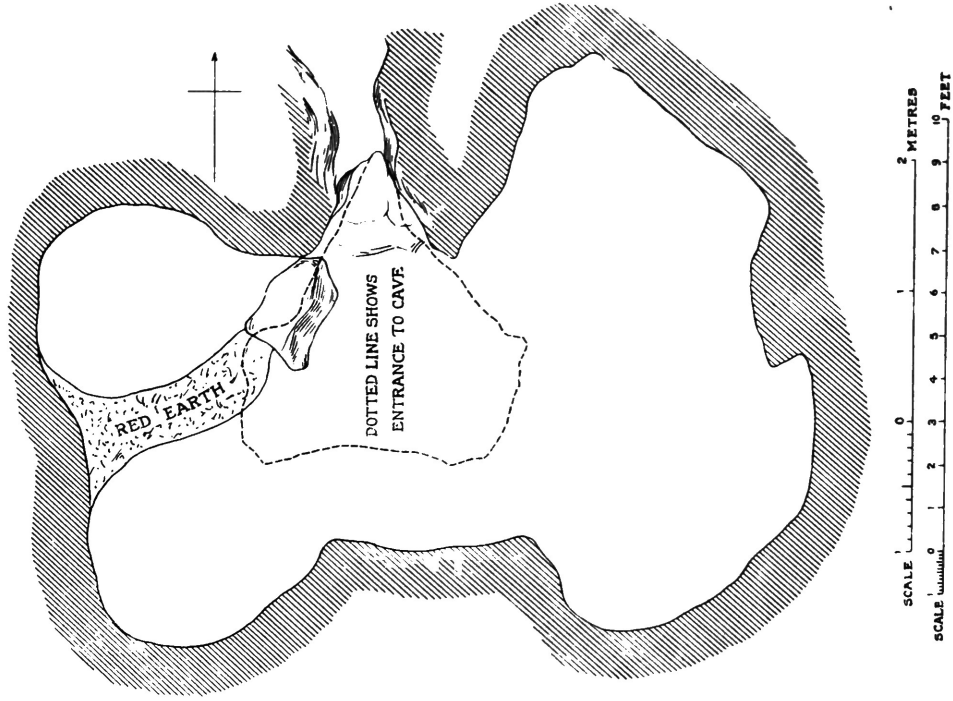
TOMB No. 8



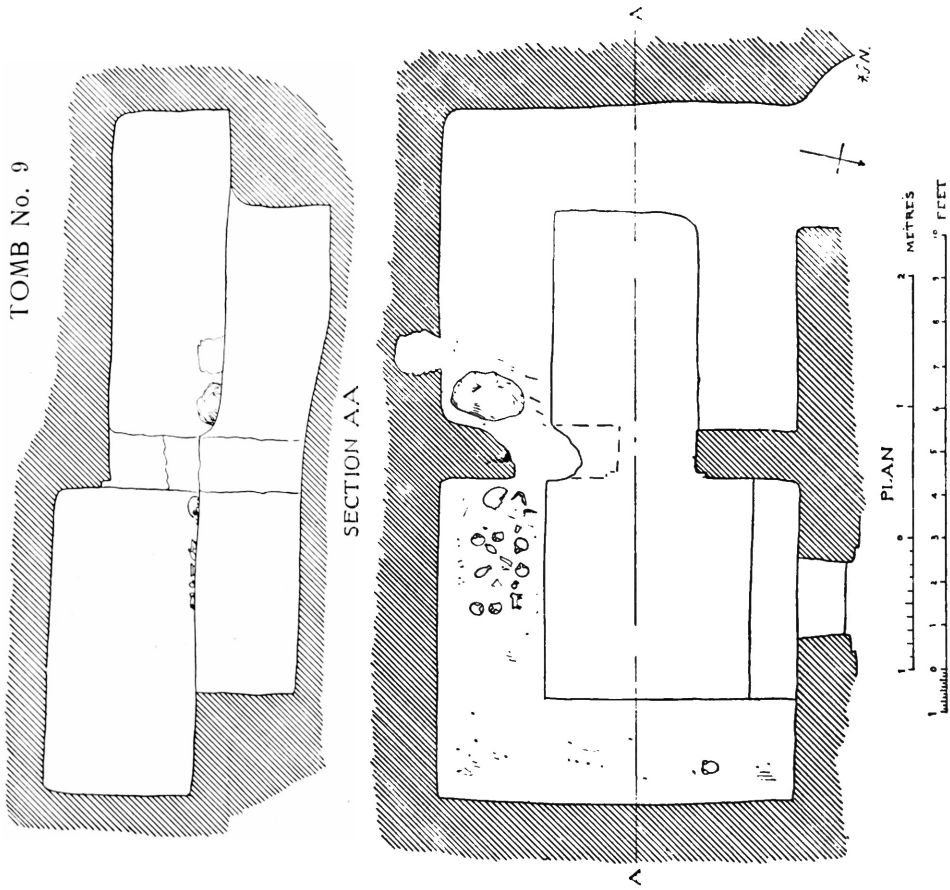
- B ALABASTER VASE
- C BRONZE INSTRUMENT
- D GRANITE SARCOPHAGUS

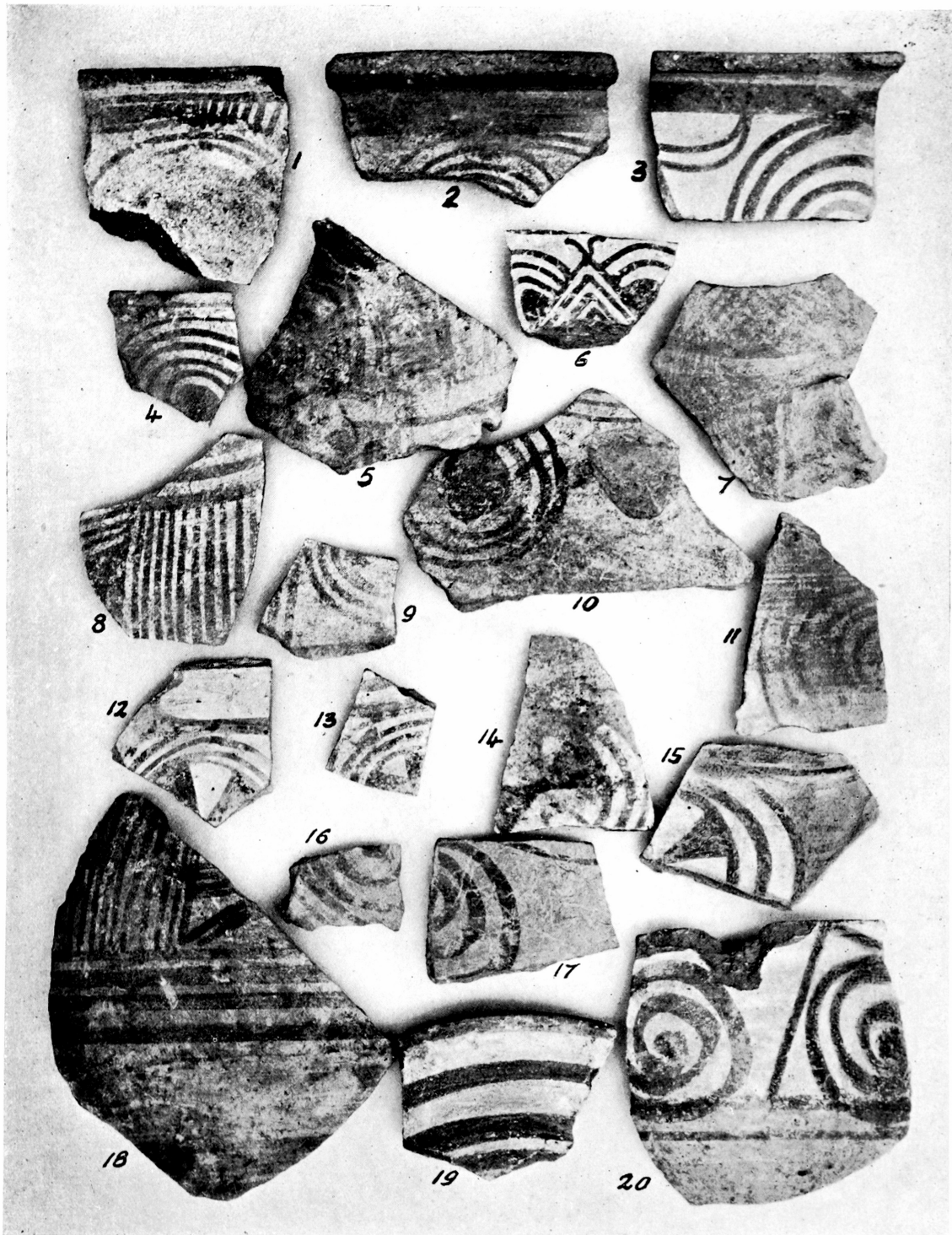


PLAN OF HIGH PLACE GROTTO

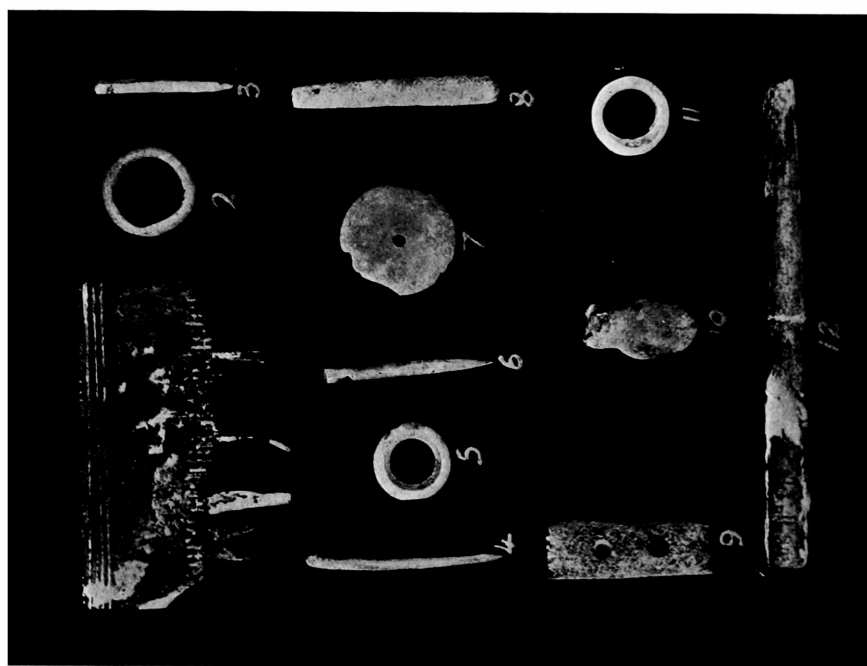
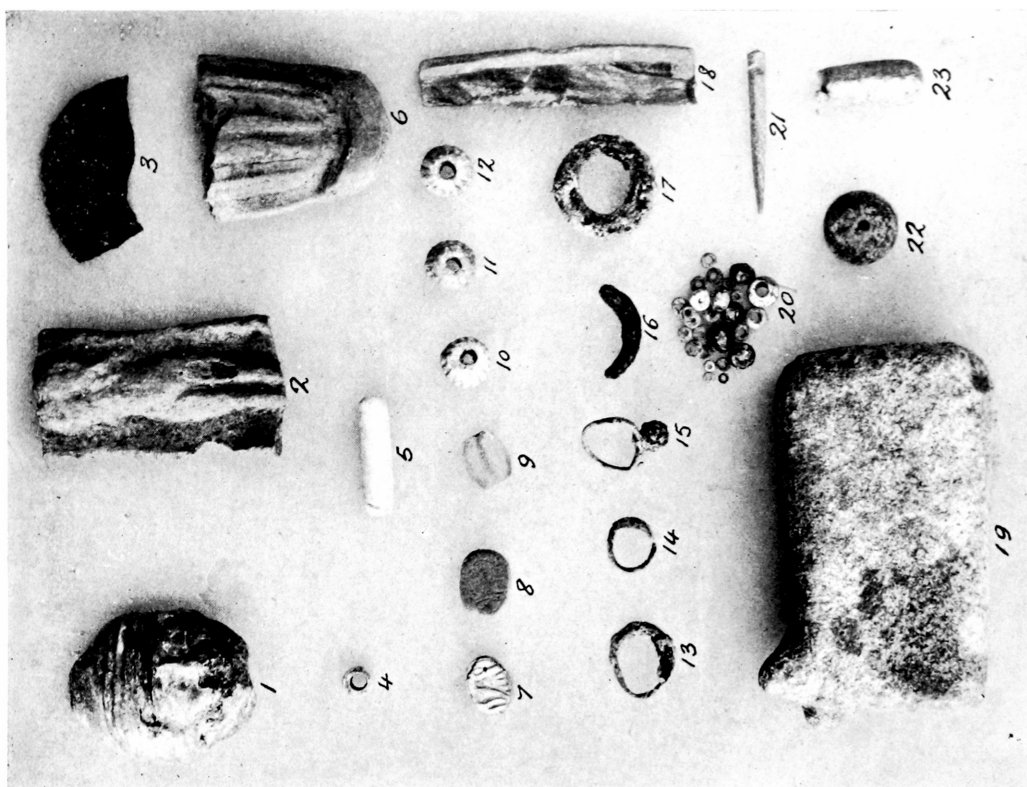


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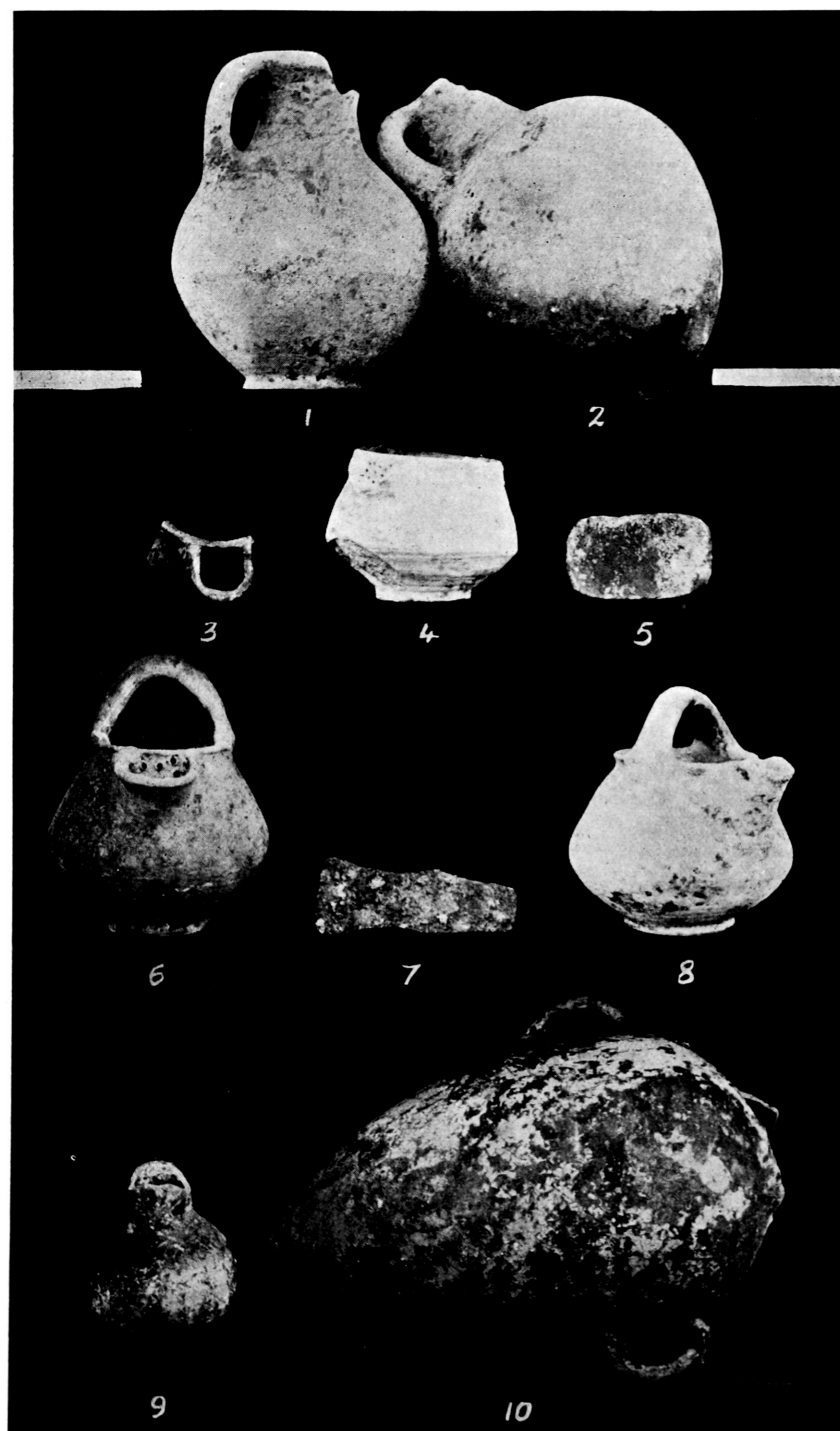




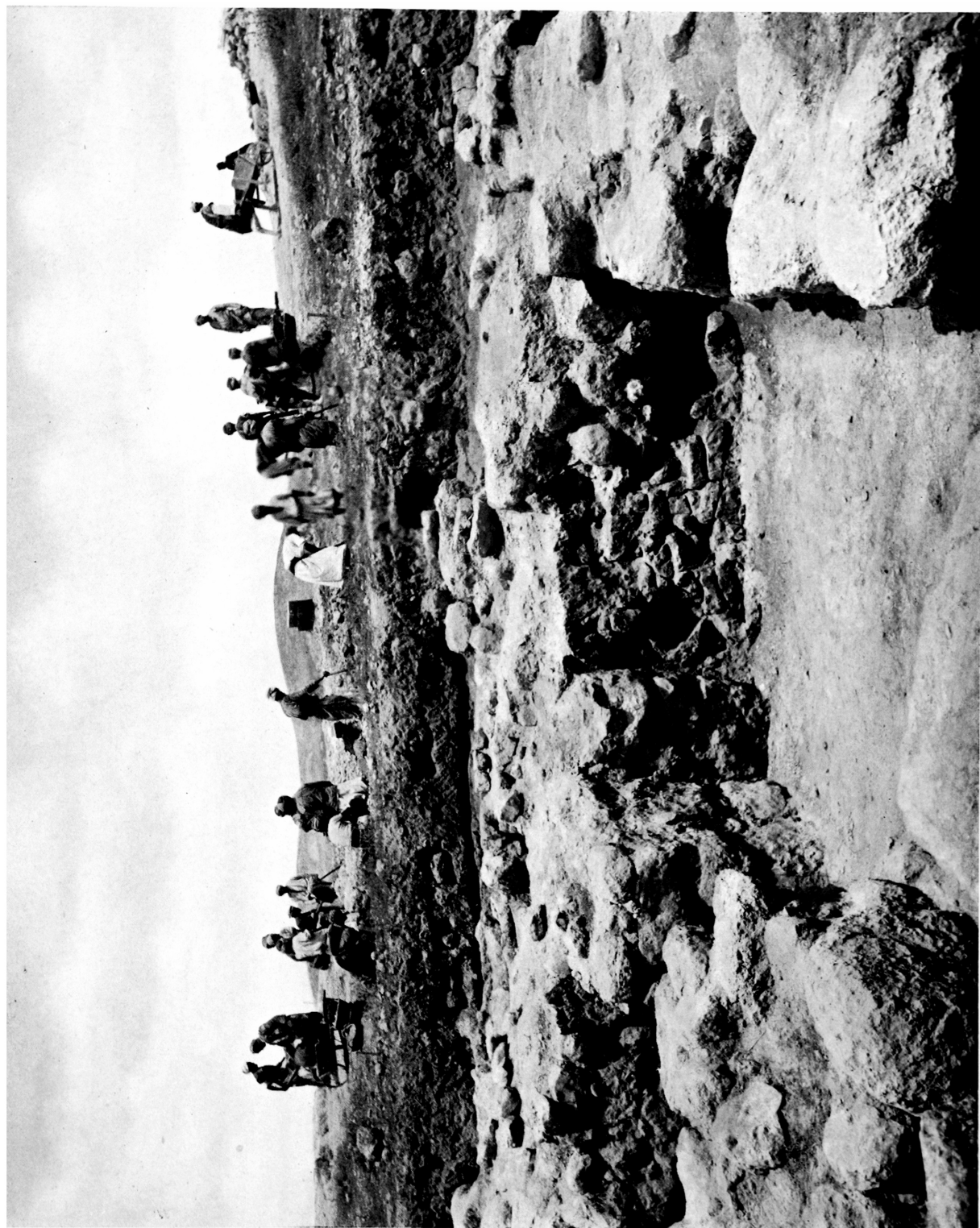
FRAGMENTS OF PHILISTINE POTTERY FROM HIGH PLACE AND CENTRAL CITY AREA.



OBJECTS FROM CENTRAL CITY AREA AND DIFFERENT PARTS OF THE SITE.



POTTERY FROM CISTERNS IN HIGH PLACE AREA.

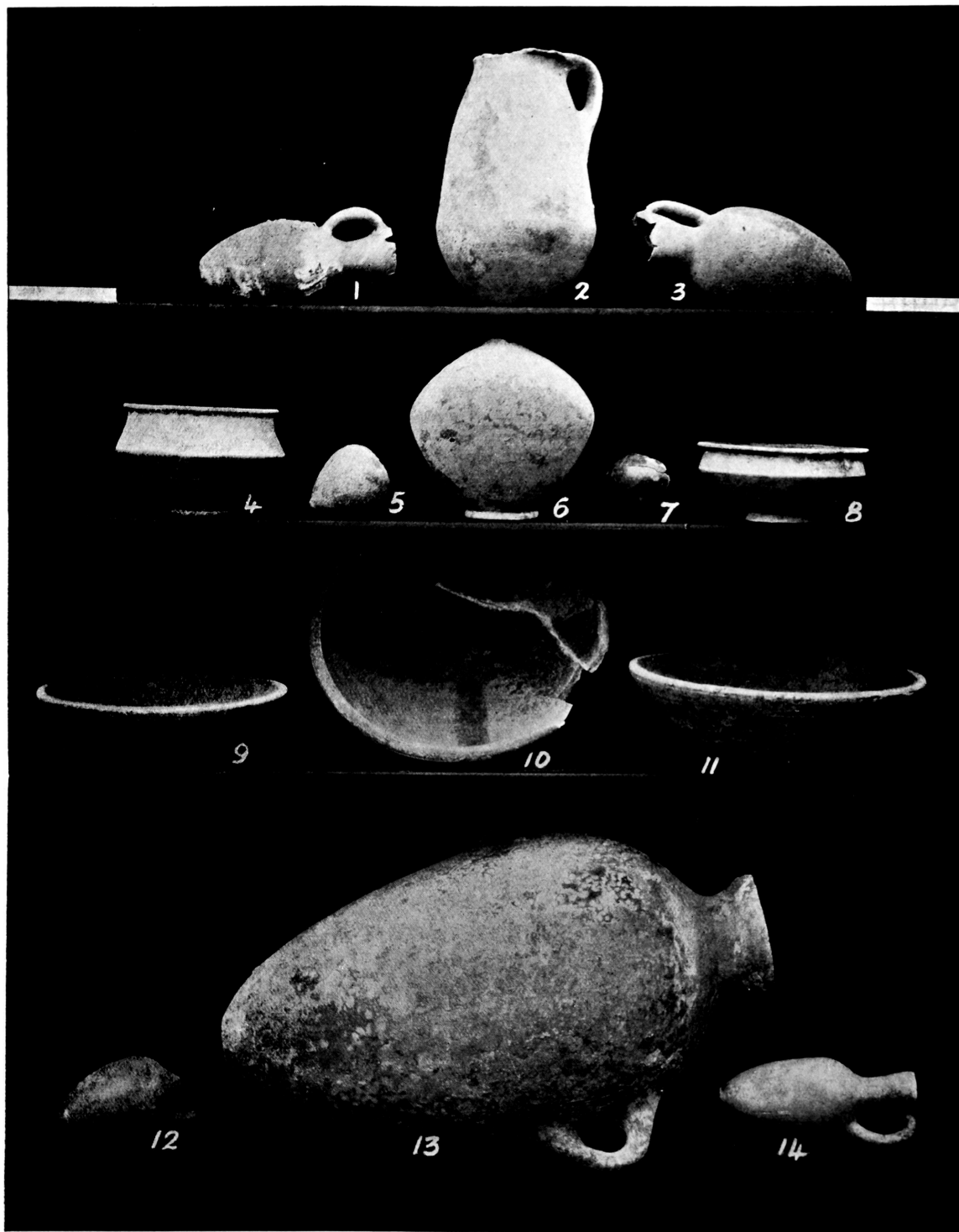


THE SOUTH GATE. SHOWING STRATIFICATION.



PAINTED PHILISTINE VASE FROM CENTRAL CITY AREA.

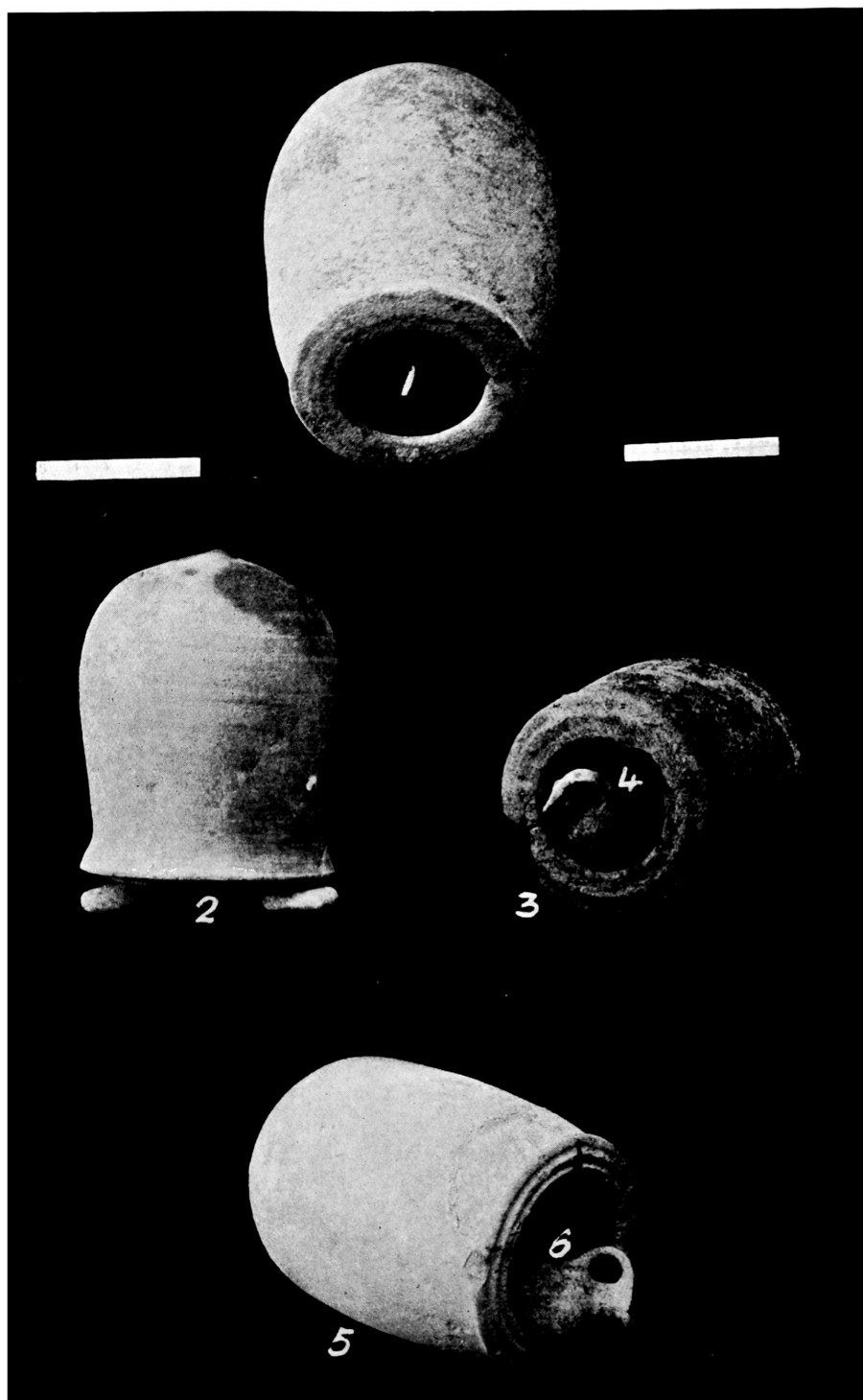
Strong colour shows fragments found. Light colour, restoration.



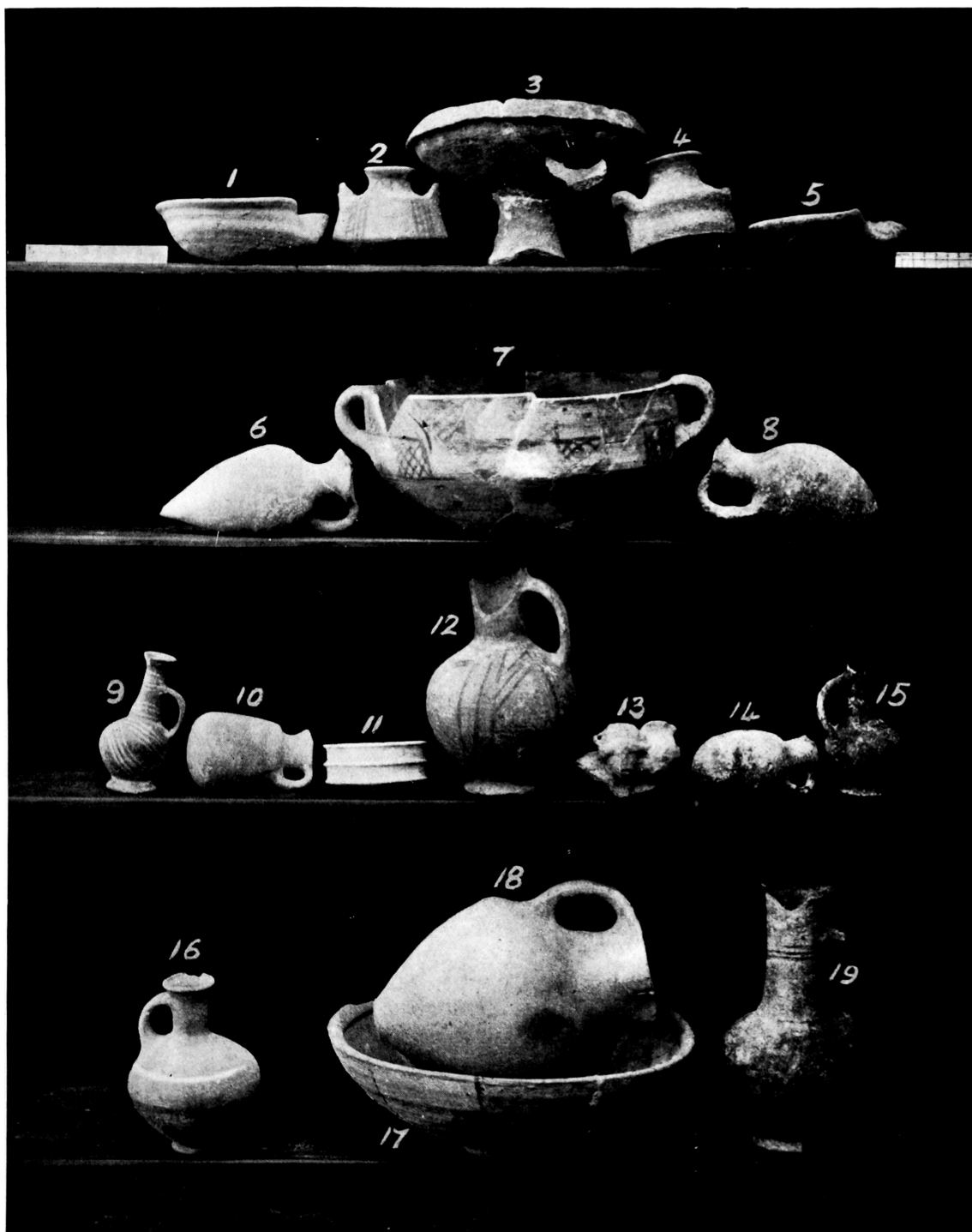
POTTERY FROM HIGH PLACE GROTTO SEPULCHRE.



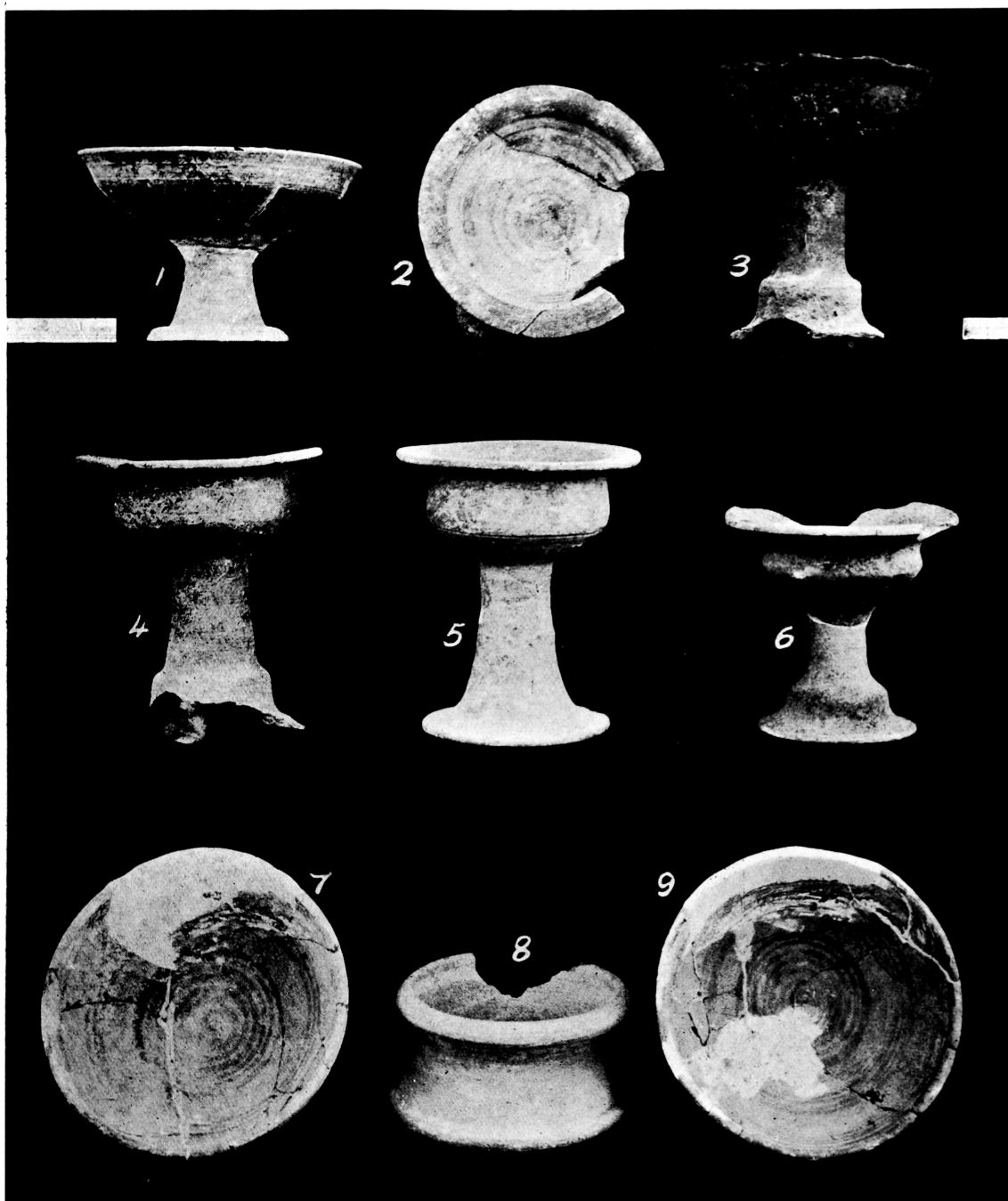
WATER JARS FOR COMPARISON OF PERIOD (p. 36).



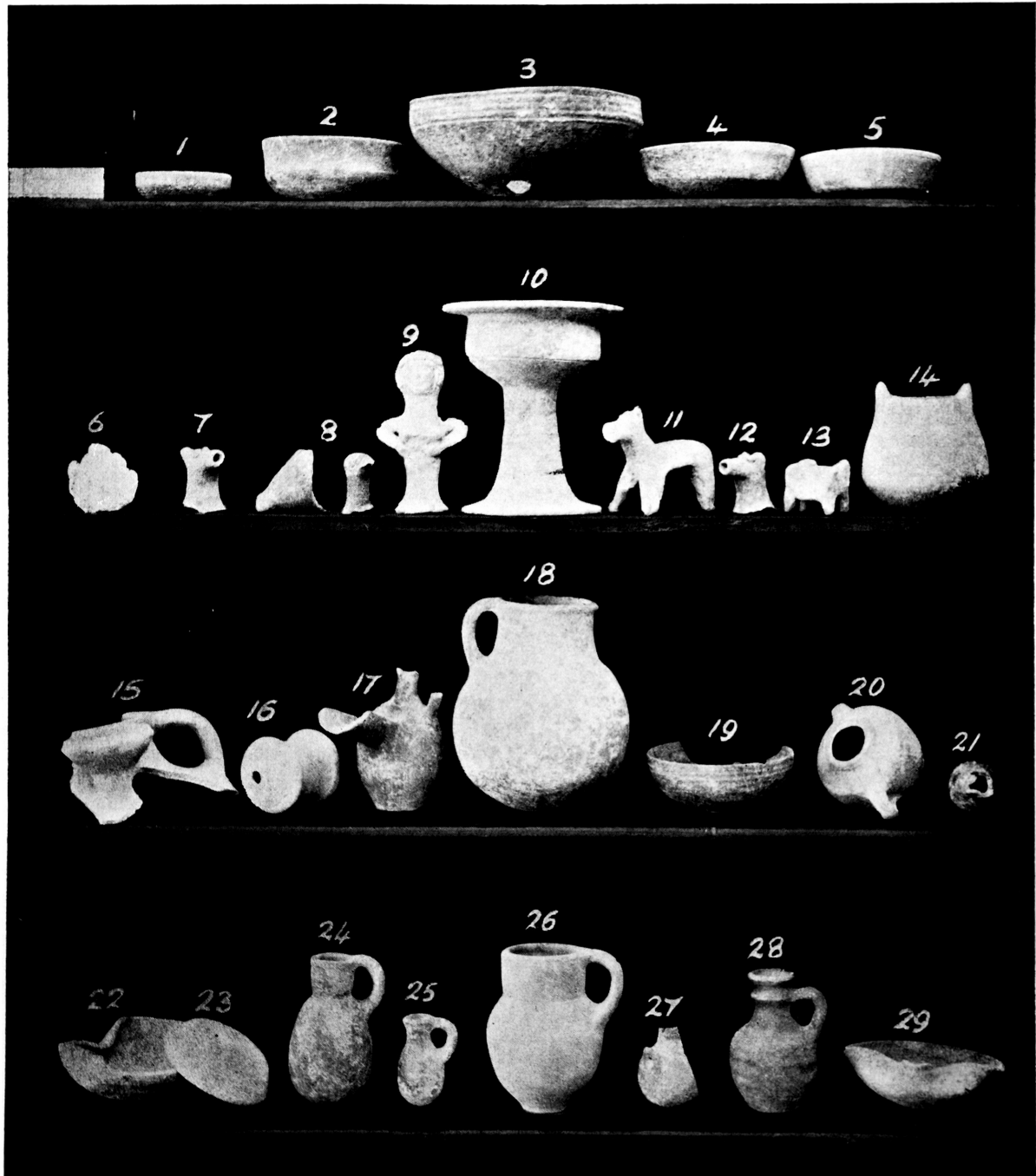
POTTERY OF RE-OCCUPATION PERIOD.



POTTERY FROM EAST GROTTA SEPULCHRE.



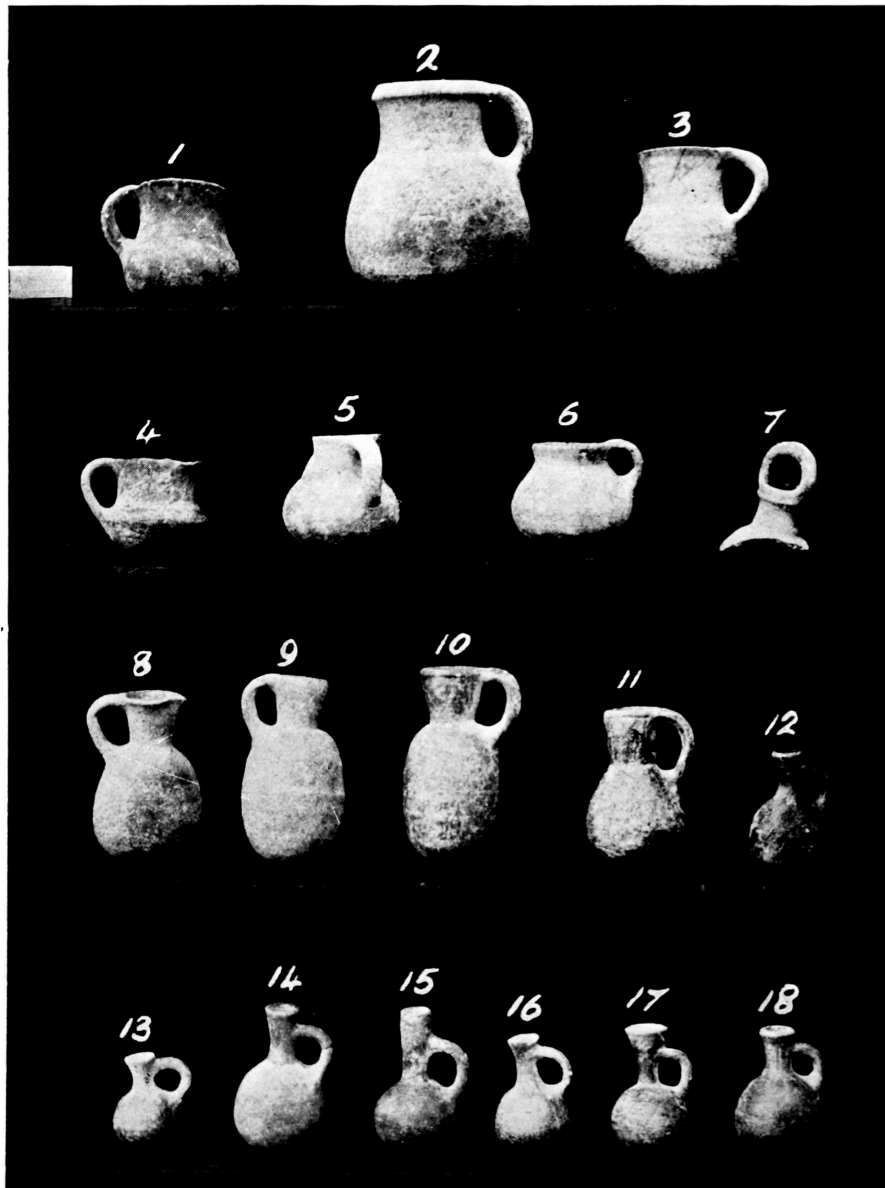
POTTERY GROUP. SHOWING DEVELOPMENT OF LIBATION CHALICE.



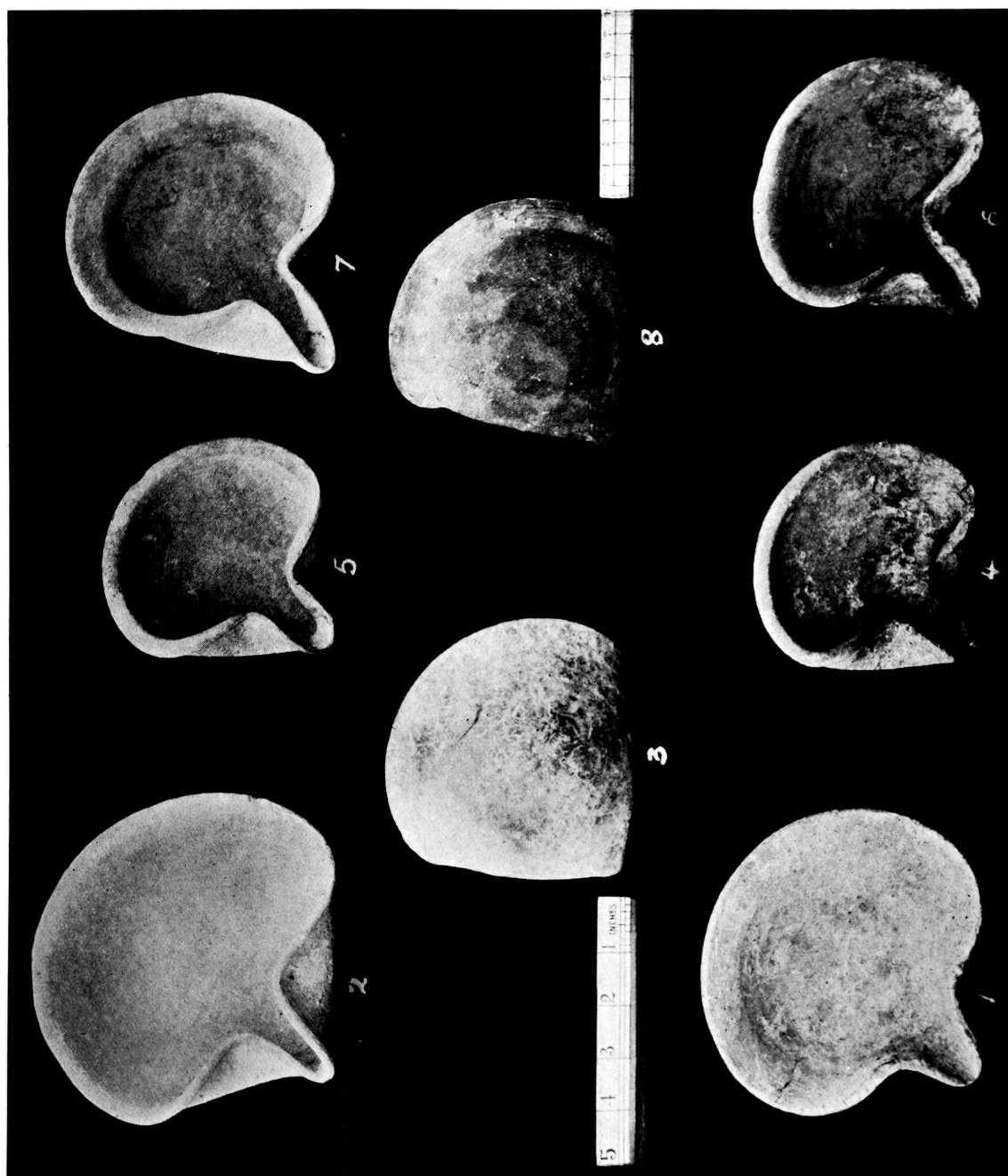
POTTERY FROM TOMB I.



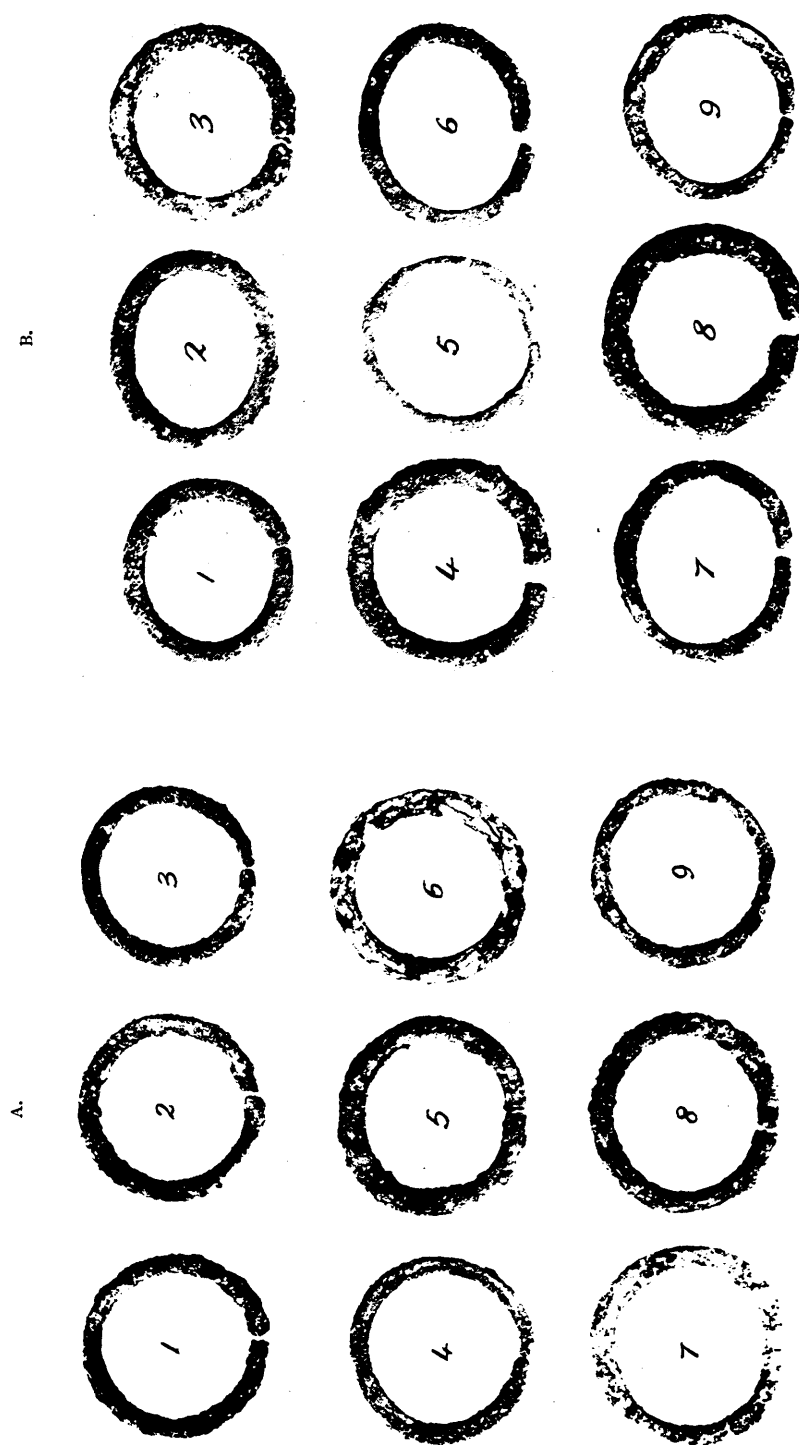
FIGURINE OF ASTARTE, WITH HEAD OF MALE DIVINITY, AND TWO MODELS OF THRONES, FROM TOMB L.



GROUP OF JUGS FROM TOMB I.

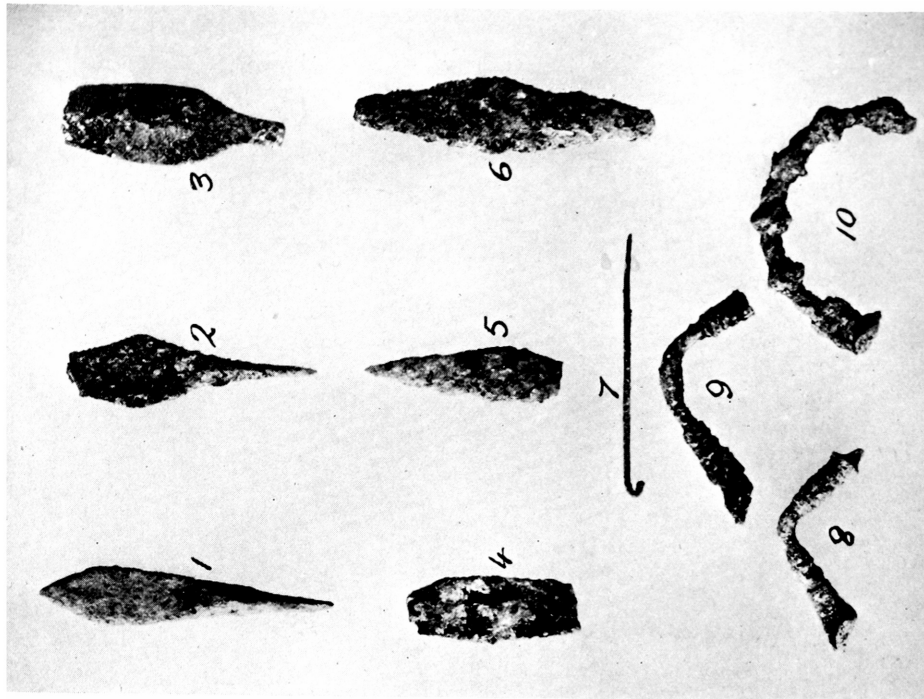


LAMPS FROM TOME I. GROUP SHOWING DEVELOPMENT.

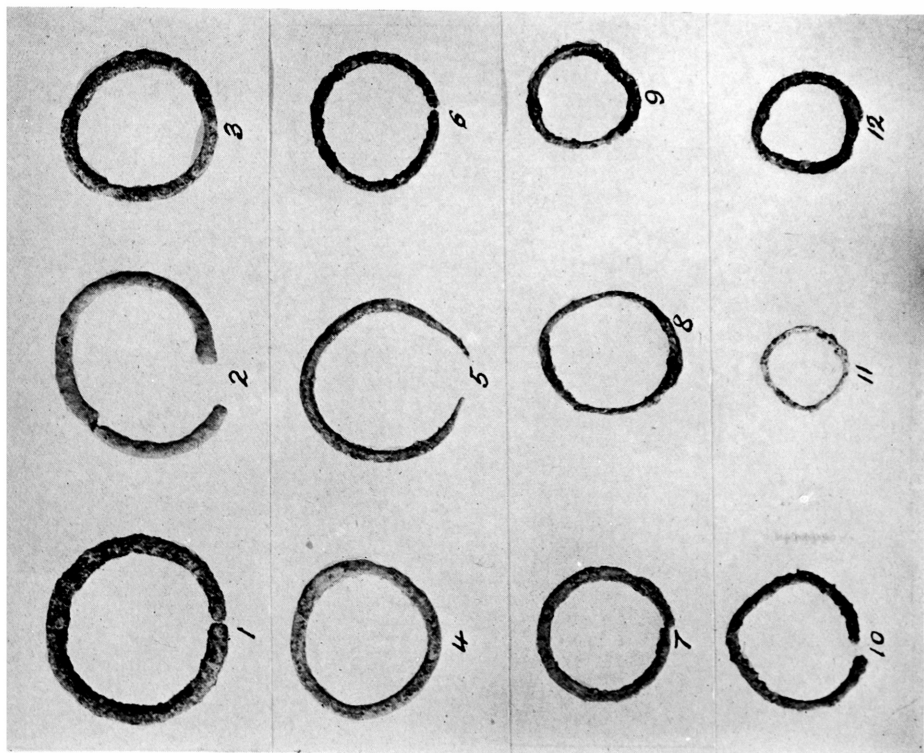


BRACELETS FROM TOMB I.

B.

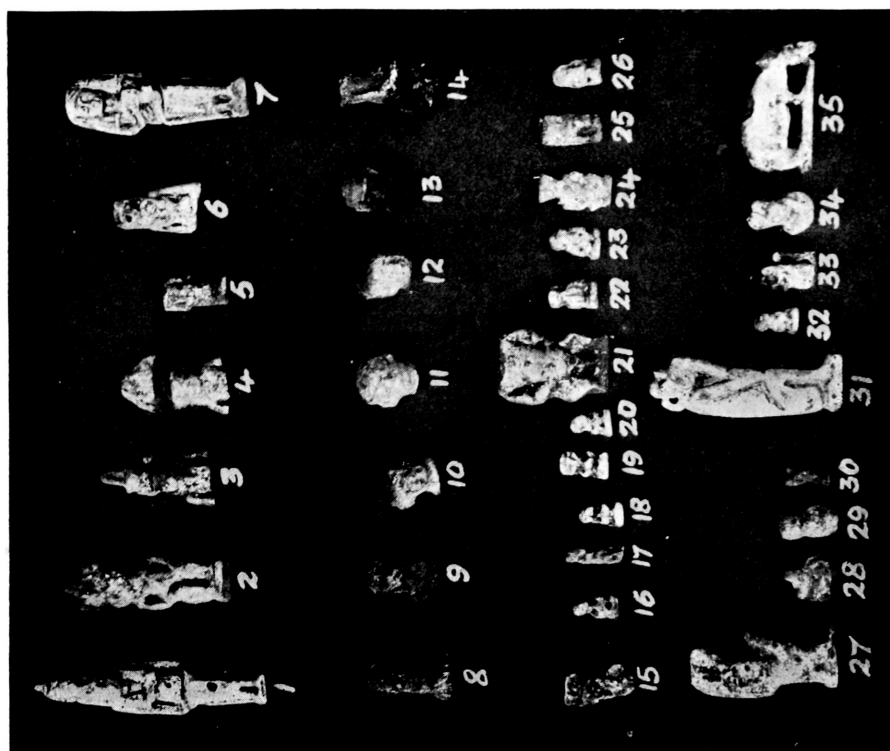


A.

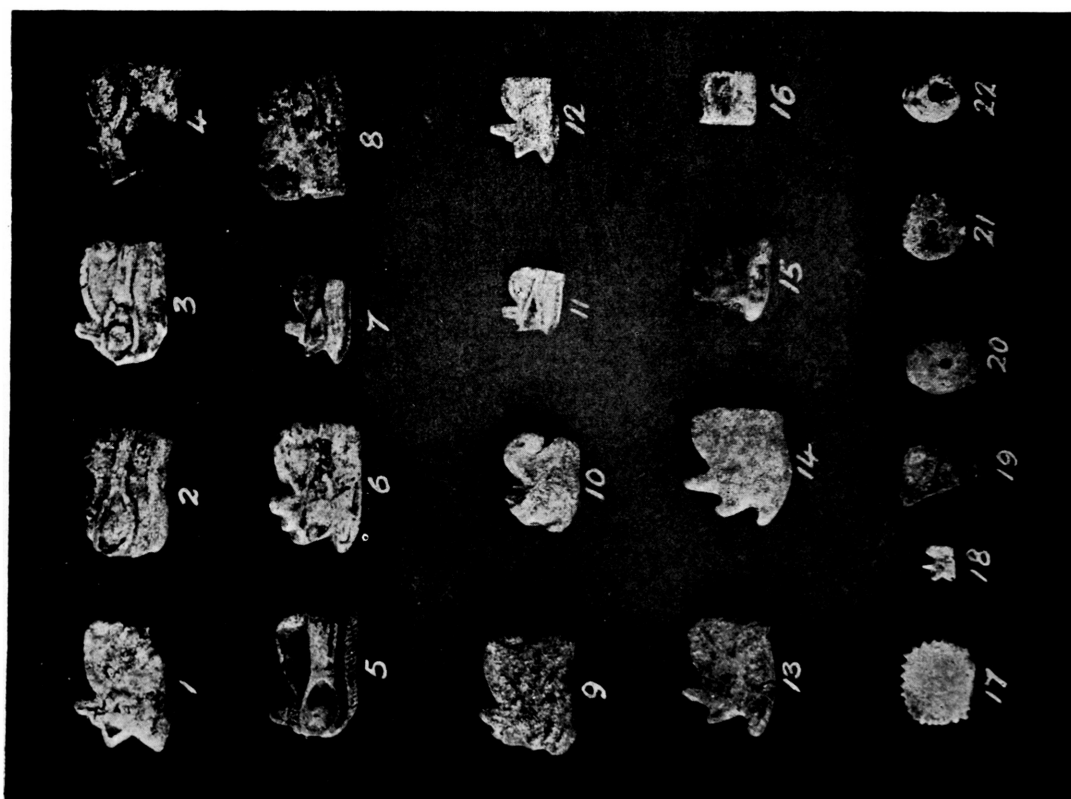


METAL OBJECTS FROM TOMB I.

B.



A.



AMULETS FROM TOMB I.

R.

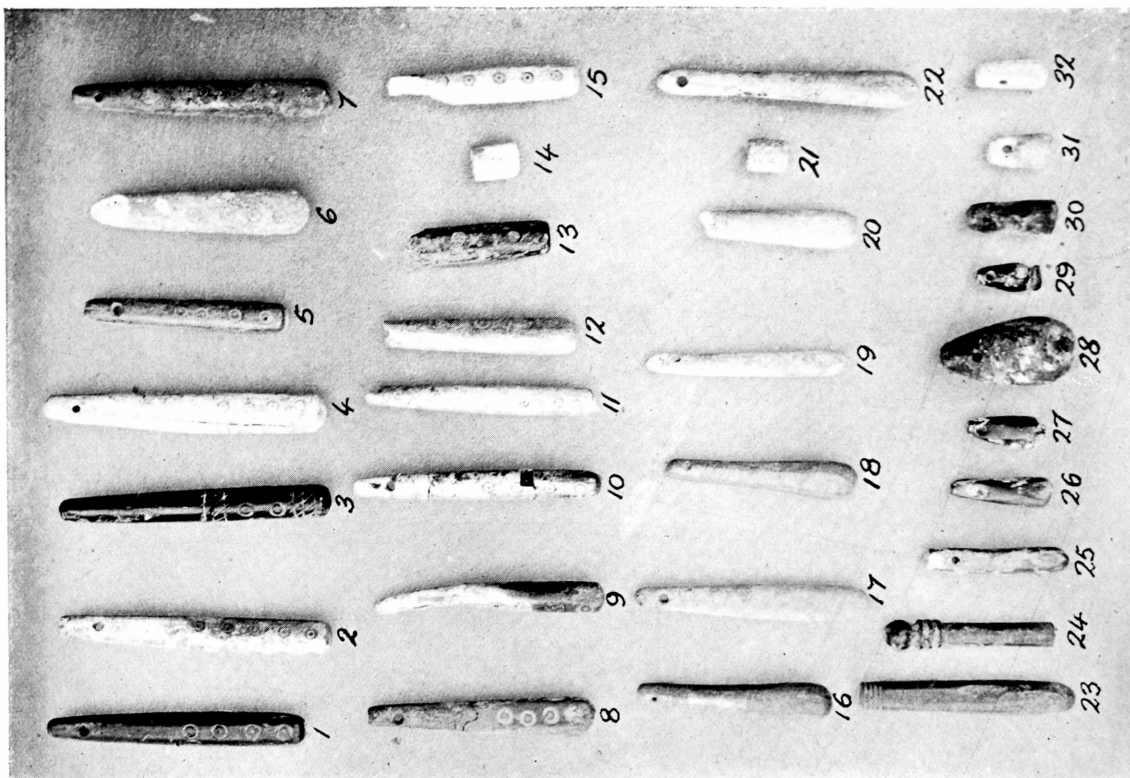


SCARABS FROM TOMB I.

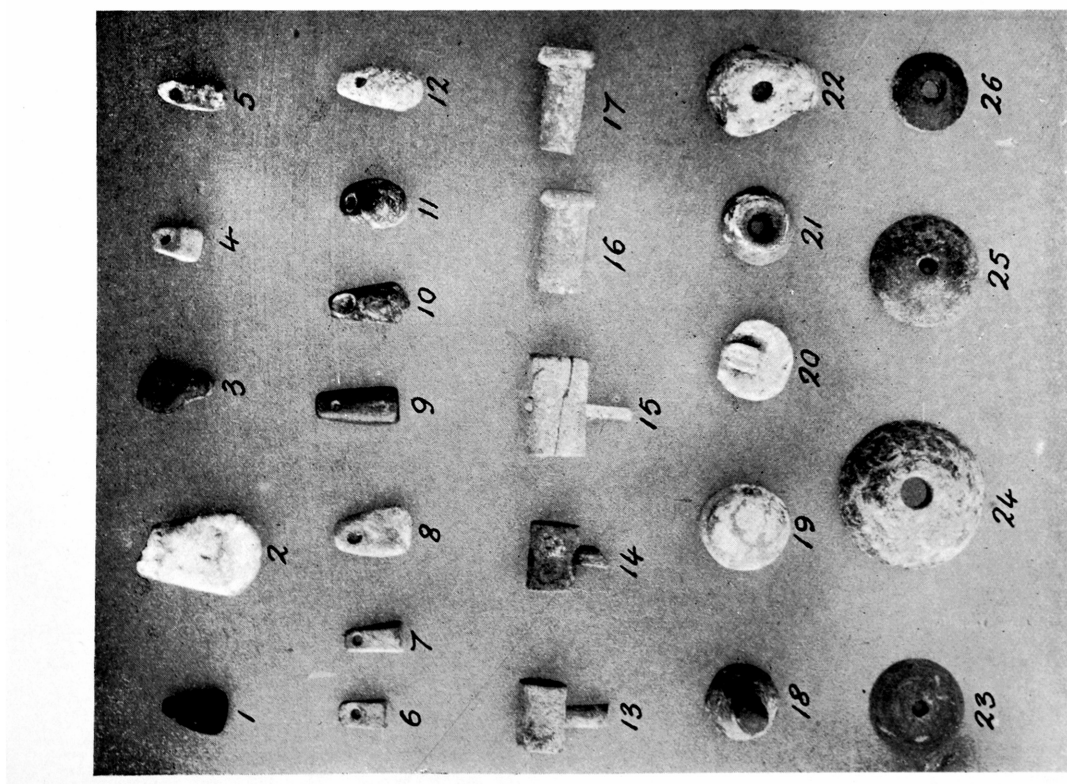
A.



B.

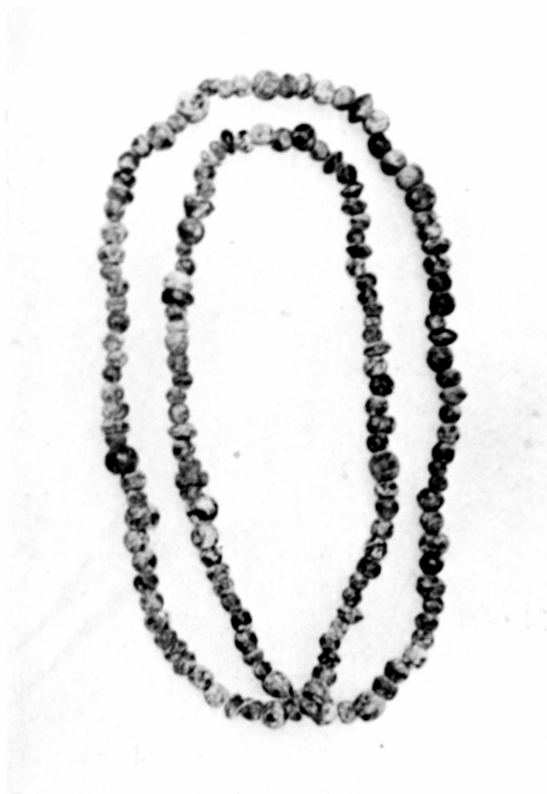


A.



AMULETS FROM TOMB I.

B
C

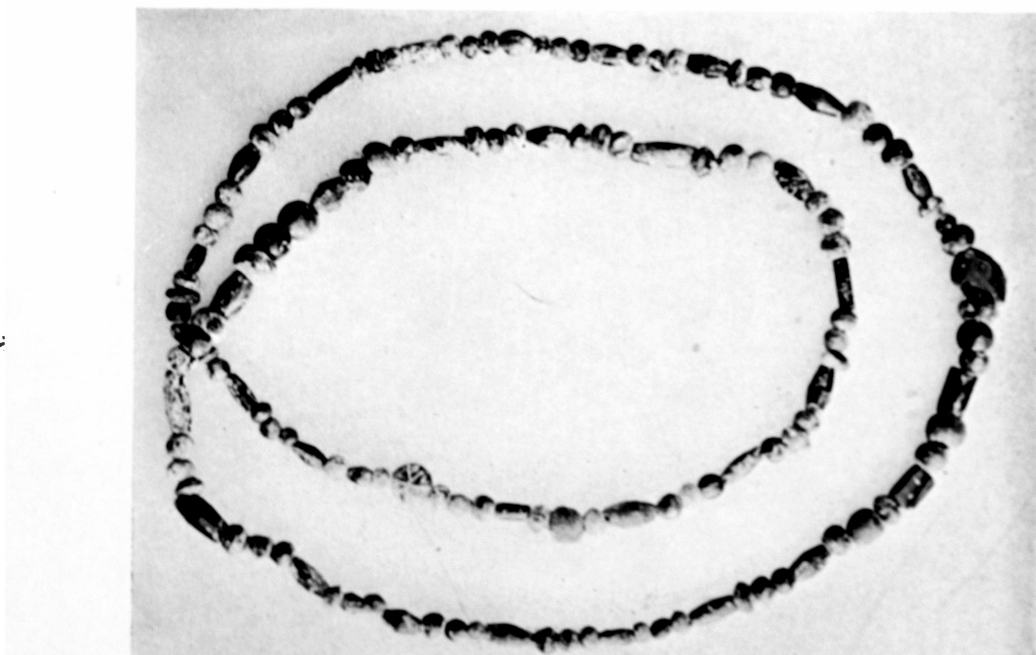


C



BEADS FROM TOME I.

A
B



C.



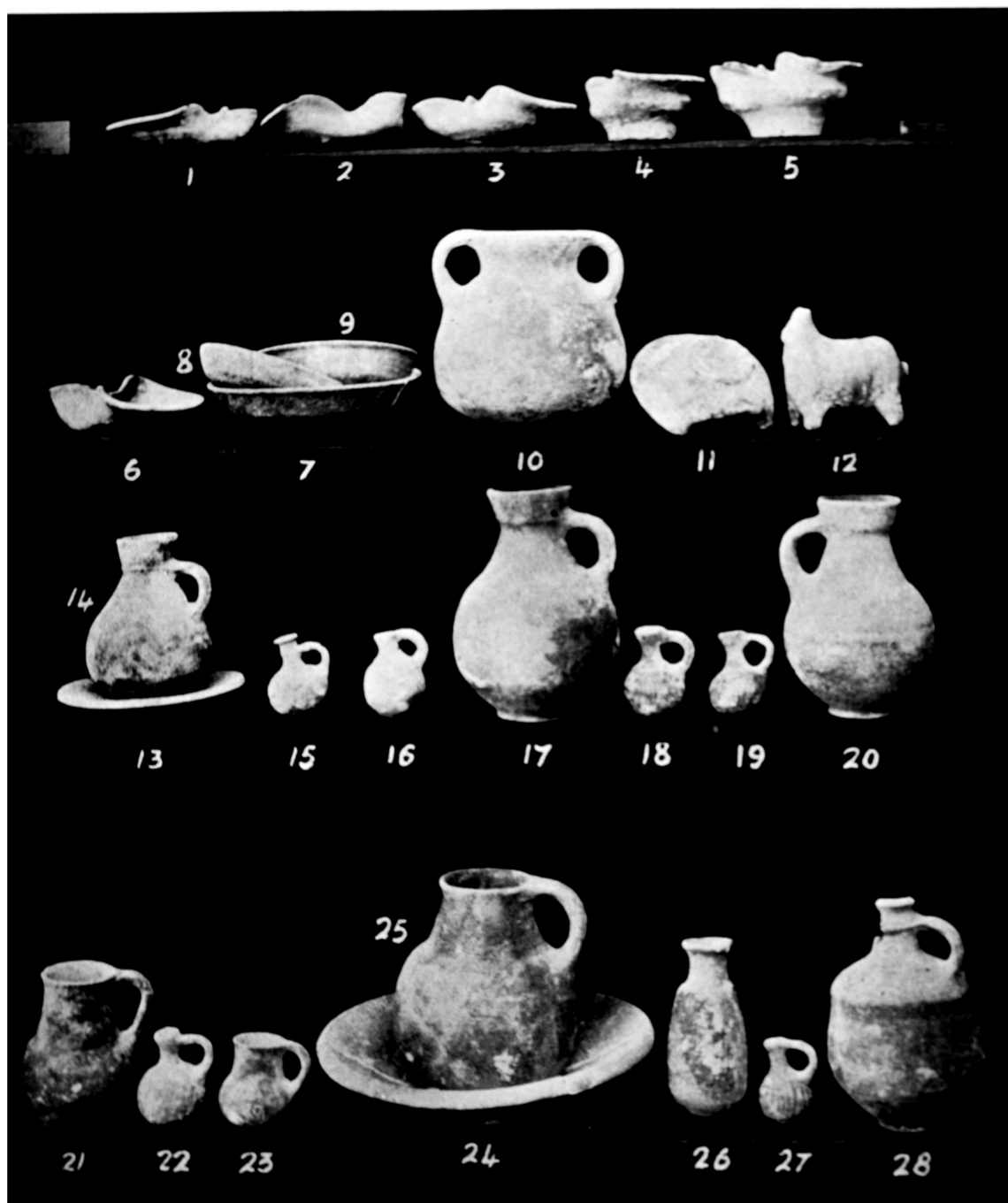
A.



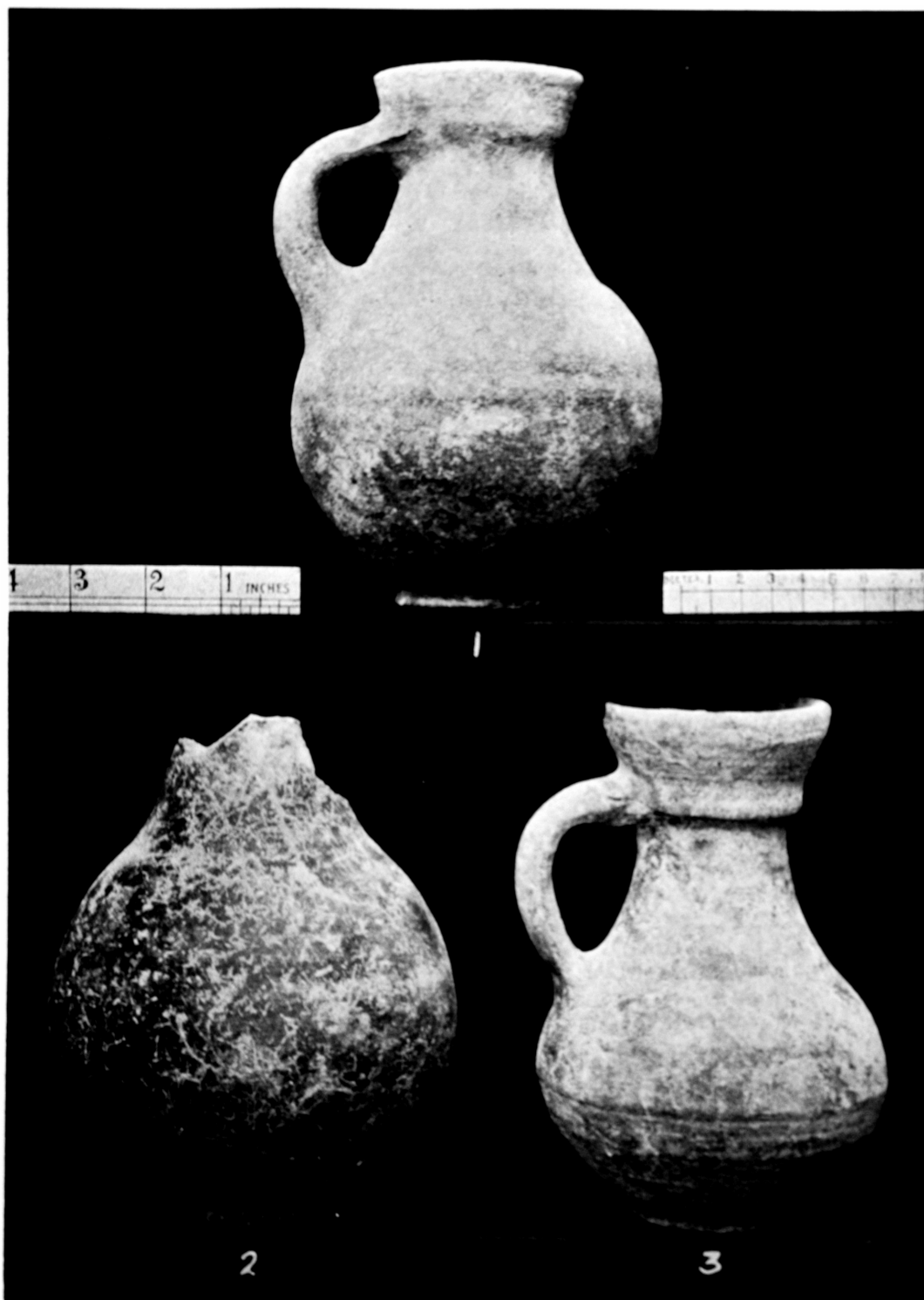
B.



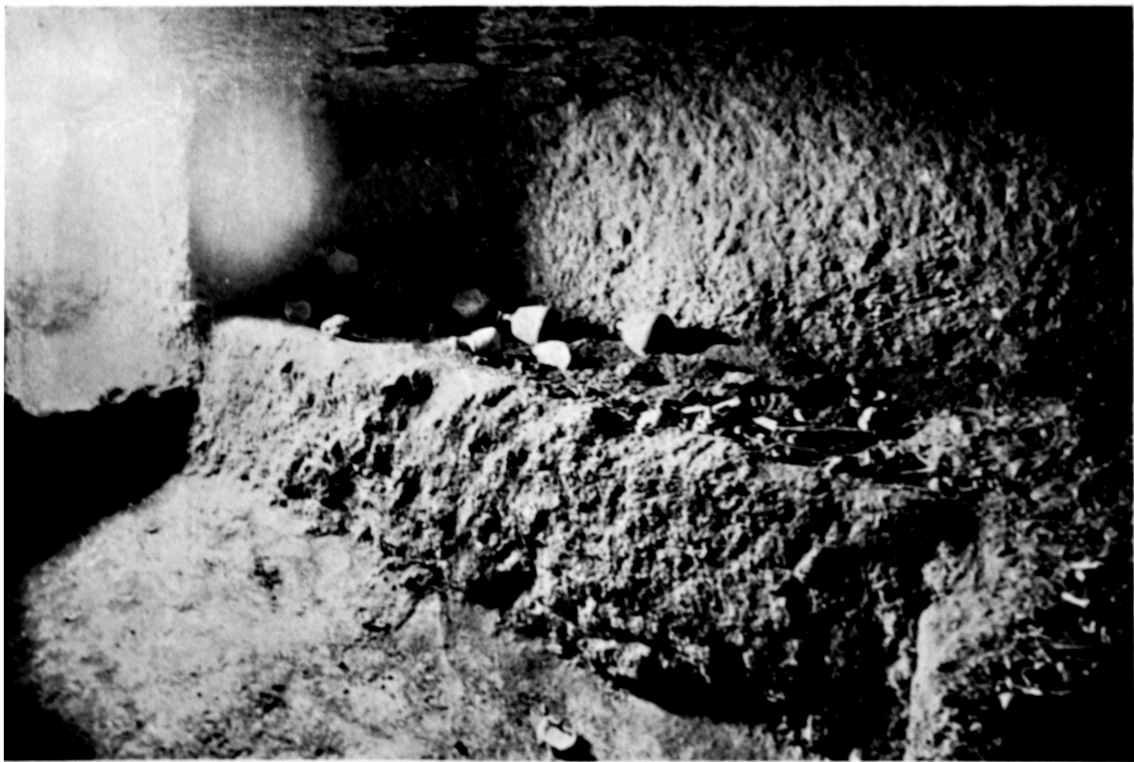
BEADS FROM TOMB I.



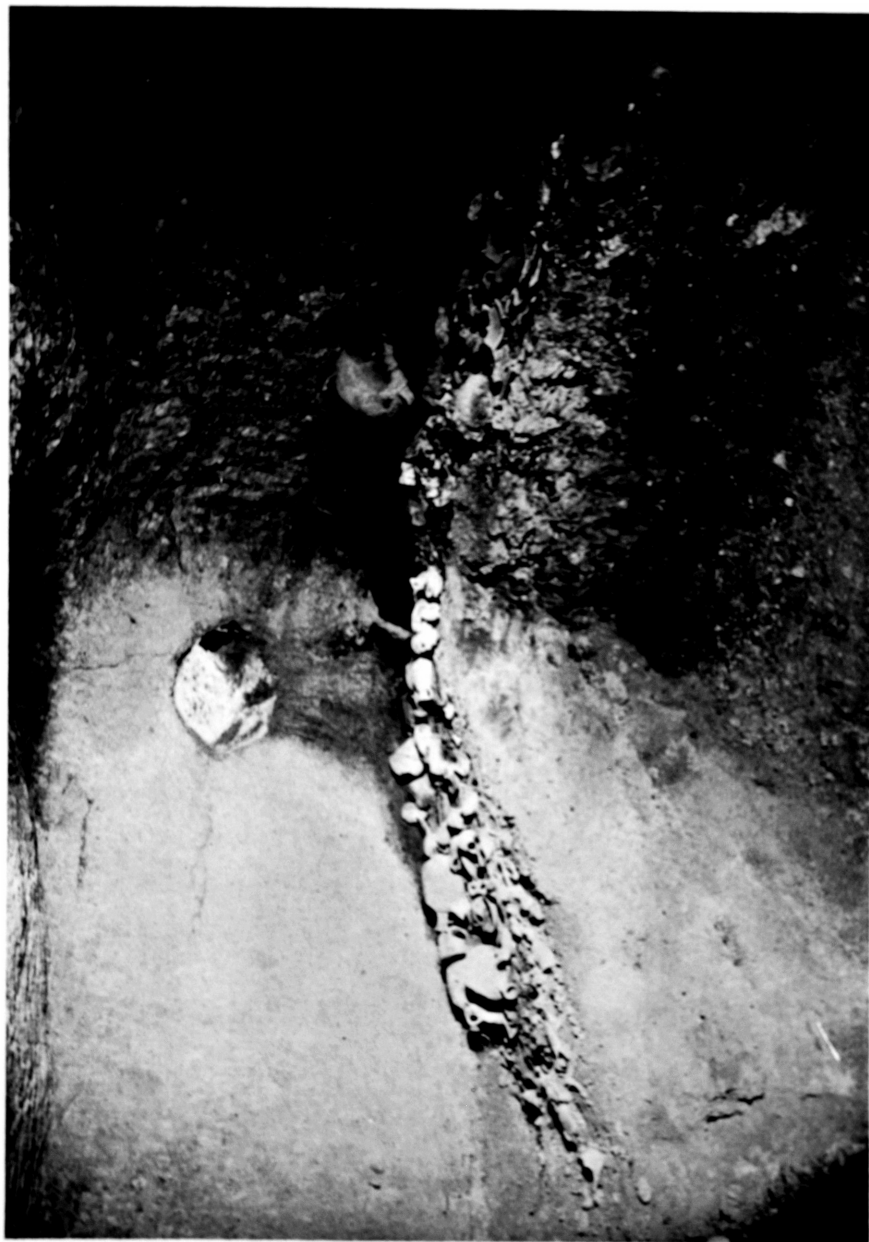
POTTERY FROM REPOSITORY OF TOMB 2.



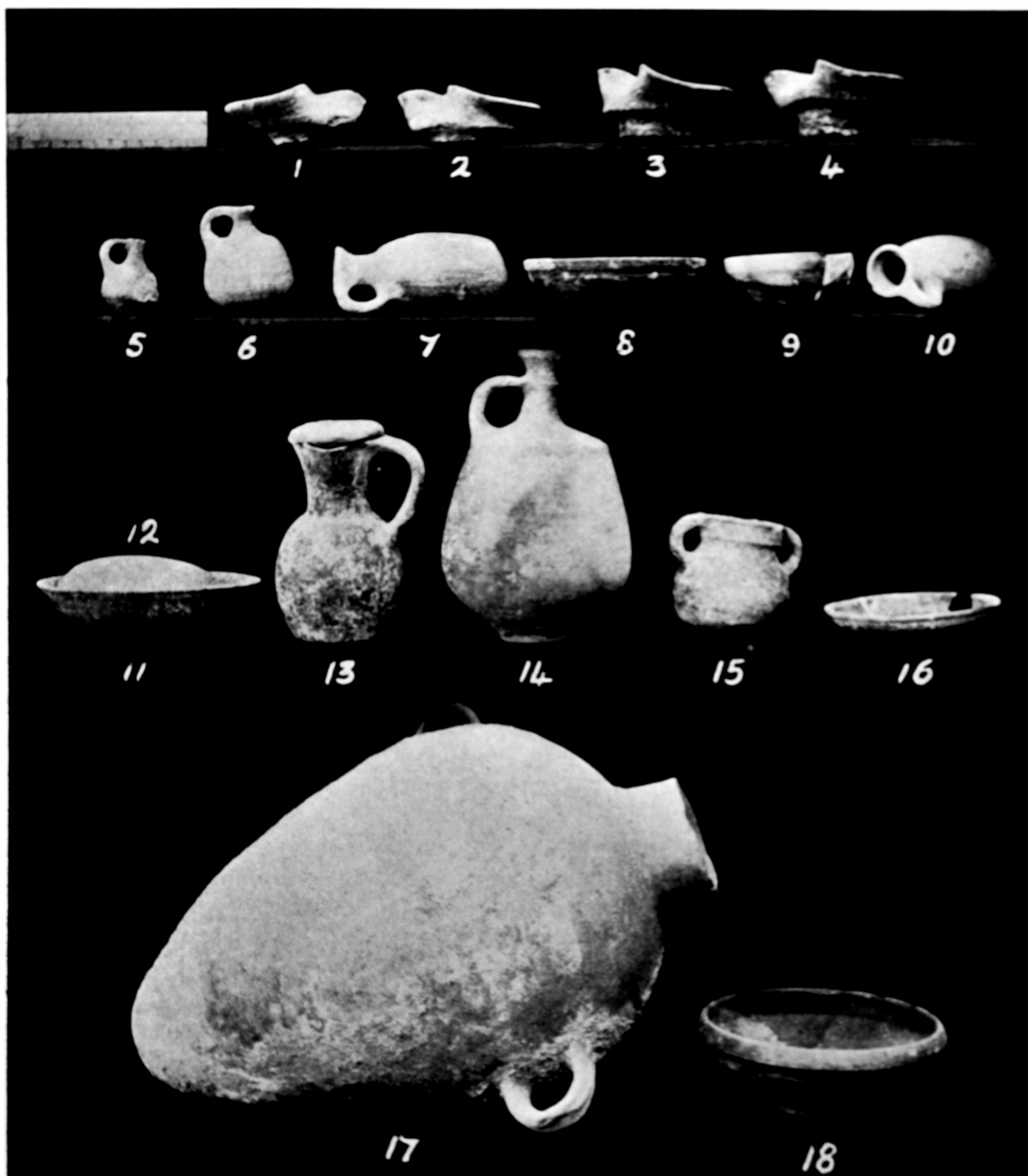
GROUP OF JUGS FOR COMPARISON.



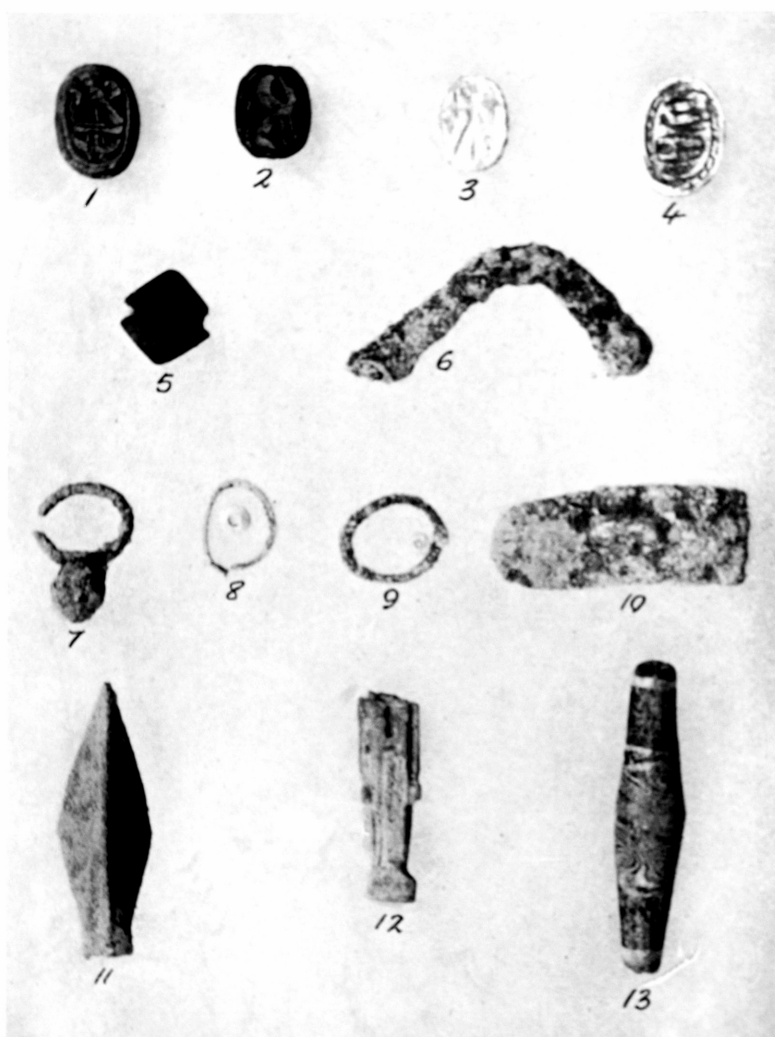
INTERIOR OF TOMB 2.



INTERIOR OF TOMB 2.



POTTERY FROM TOMB 2.



NOS. 1 TO 6. —OBJECTS FROM TOMB 2.

" 7 " 13.— " " 3.

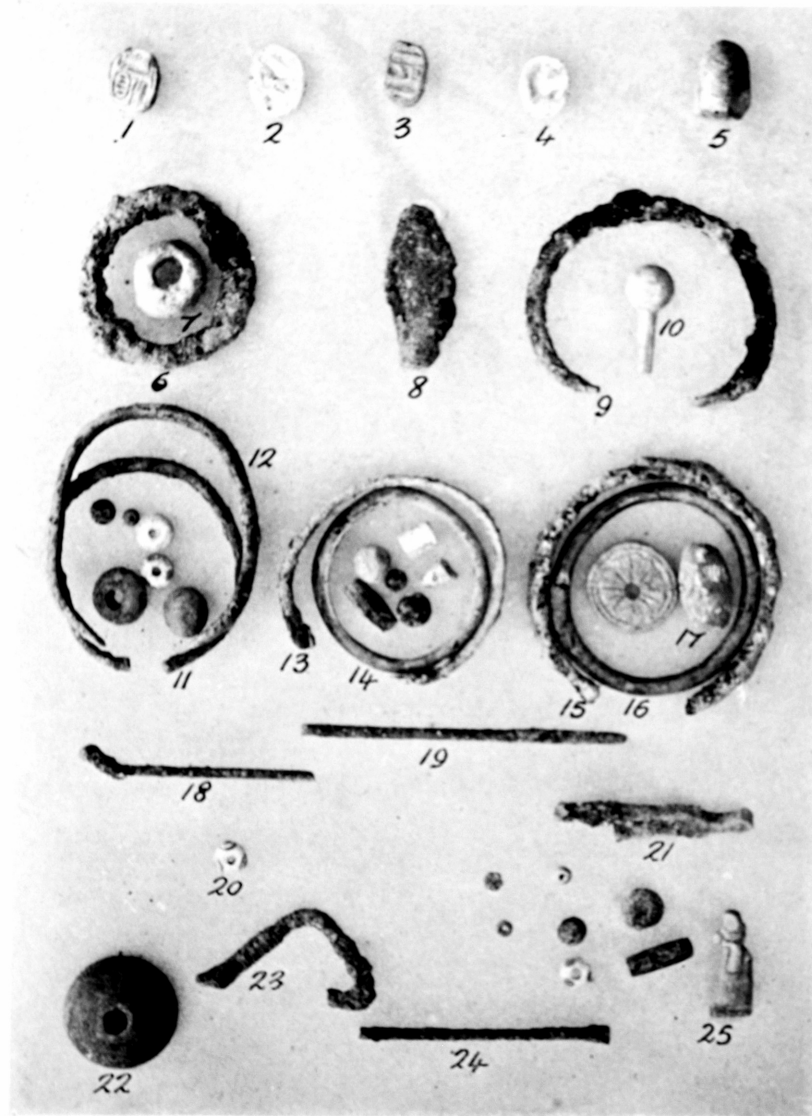
A.



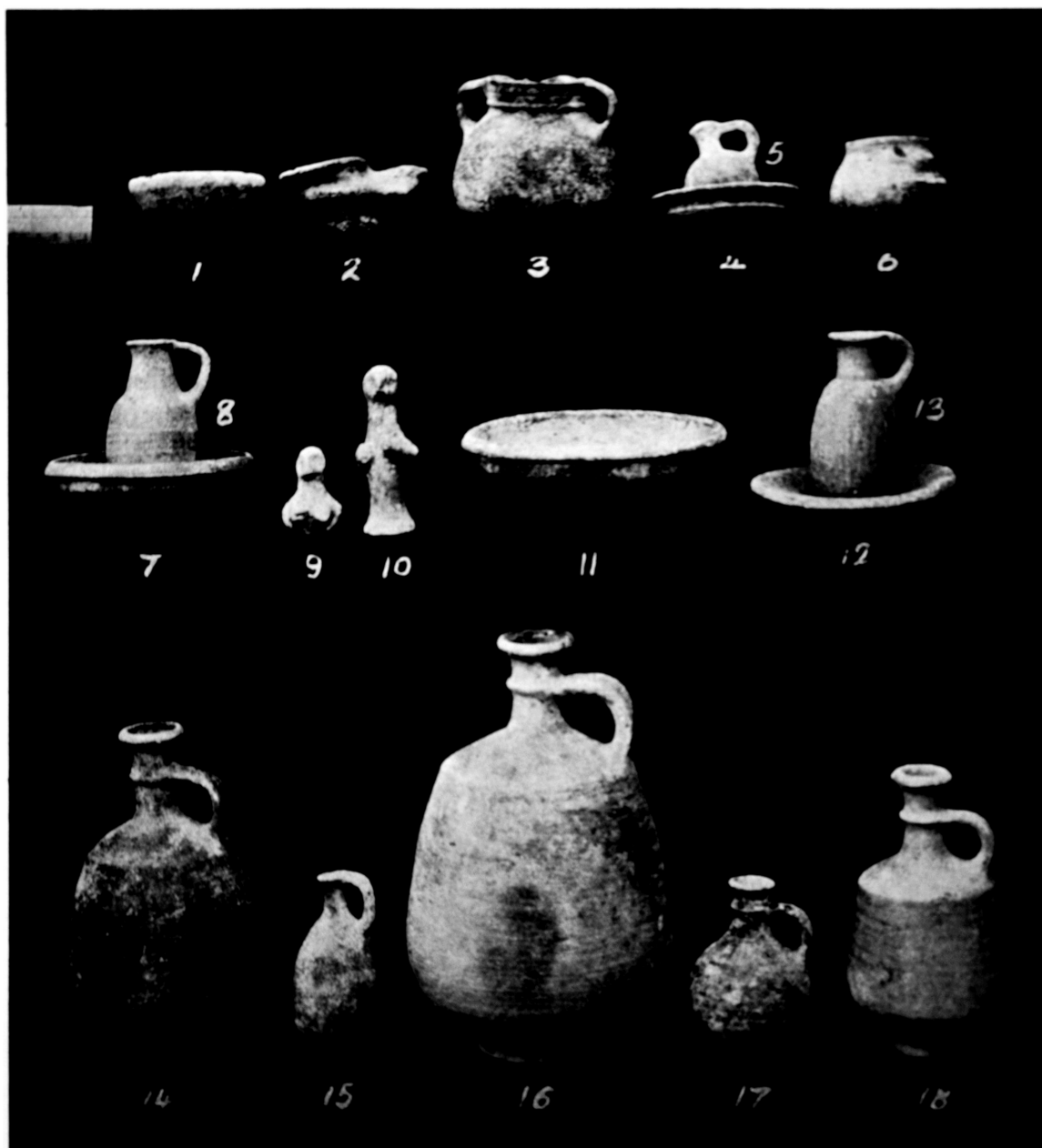
B.



POTTERY FROM TOMB 4 REPOSITORY AND TOMB 4.



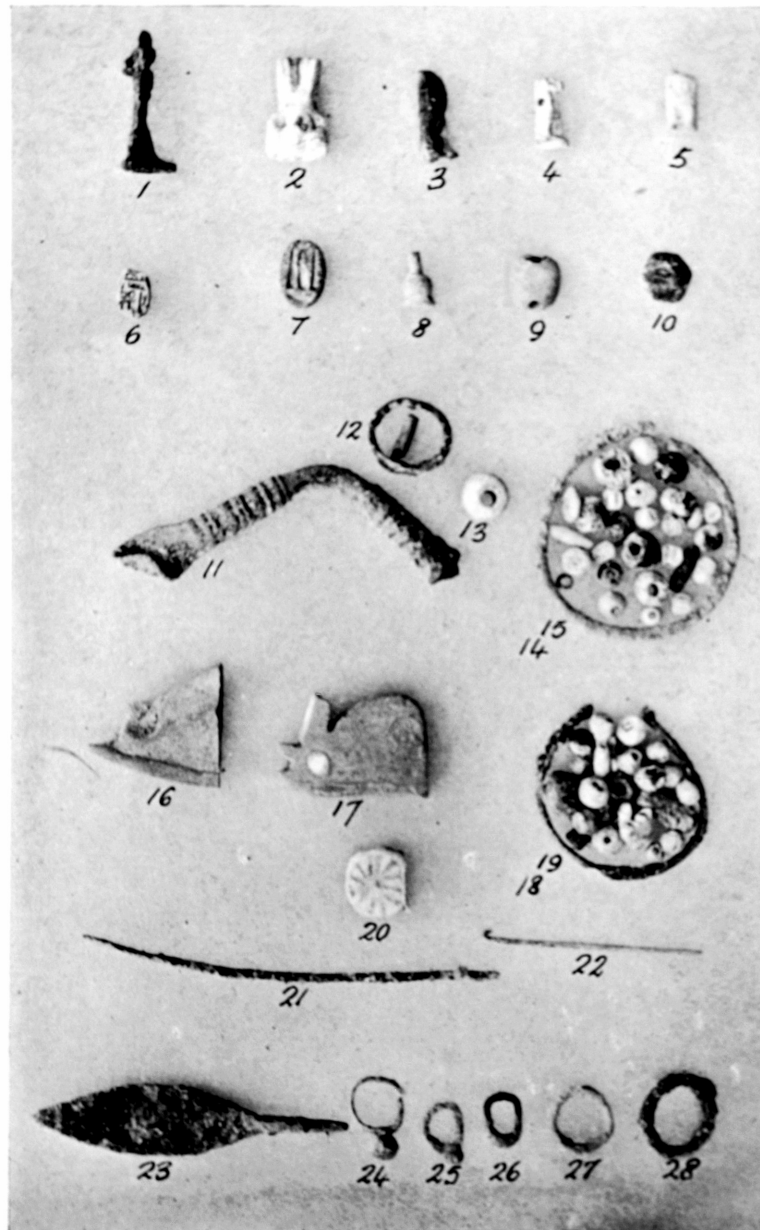
NOS. 1 TO 10.—OBJECTS FROM TOMB 4.
 " 11 " 25. — " " 4 REPOSITORY.



POTTERY FROM TOMB 5.

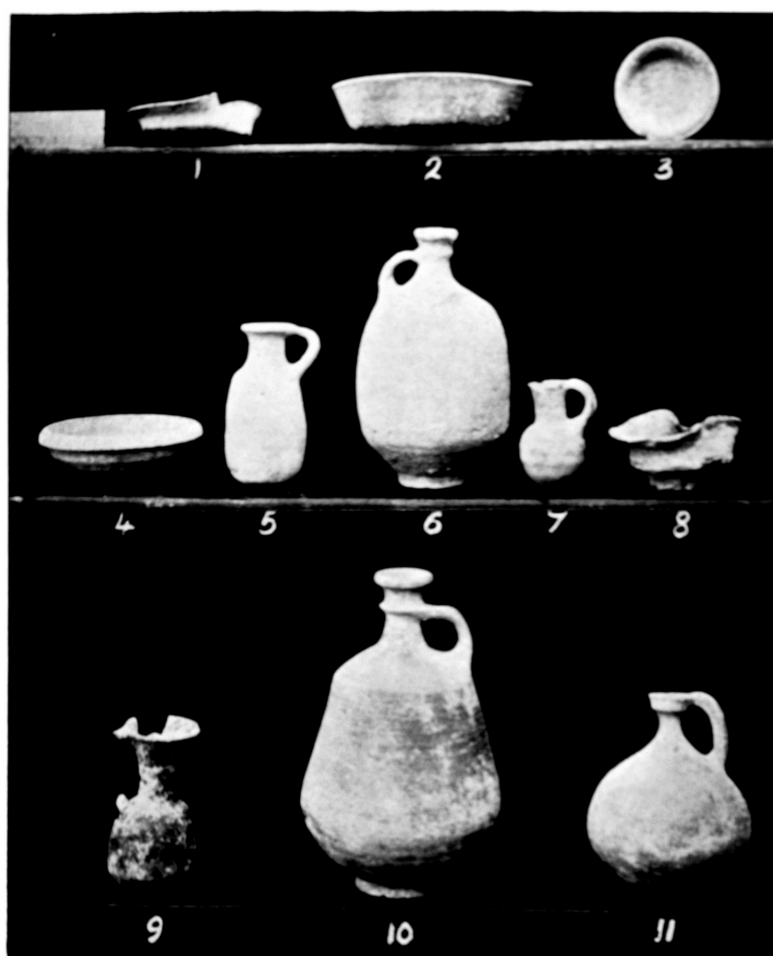


FIGURINES FROM TOMB 5.



OBJECTS FROM TOMB 5.

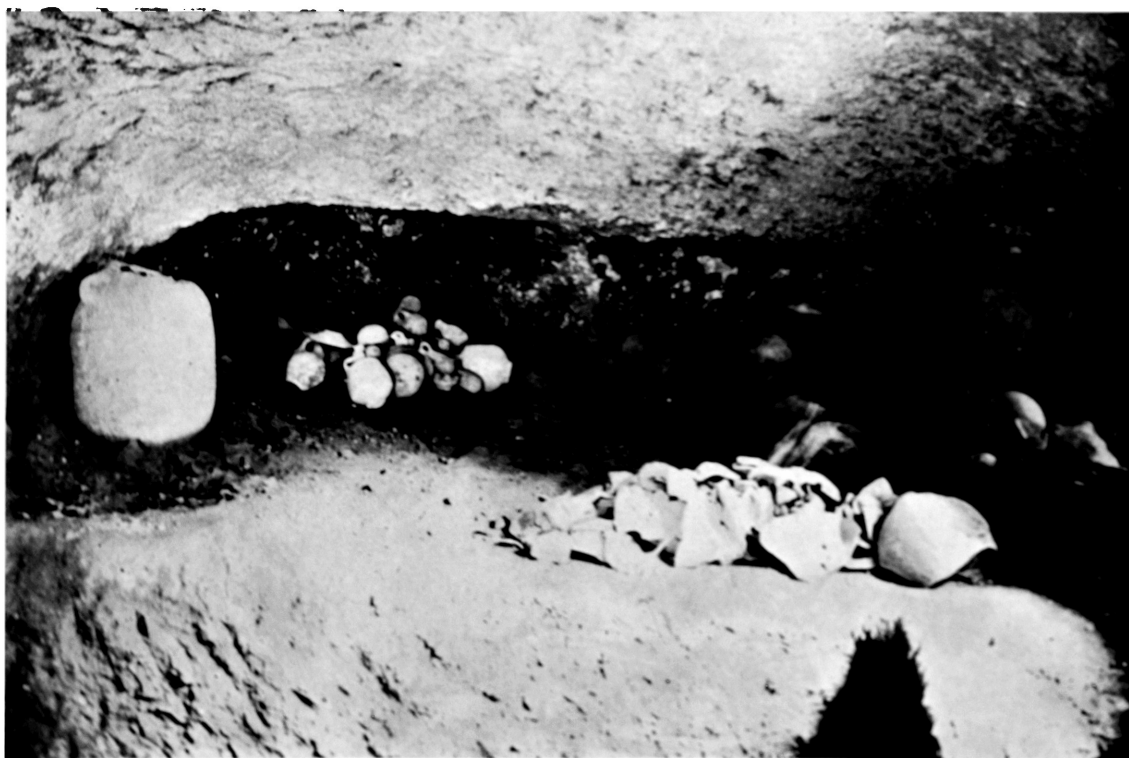
A.



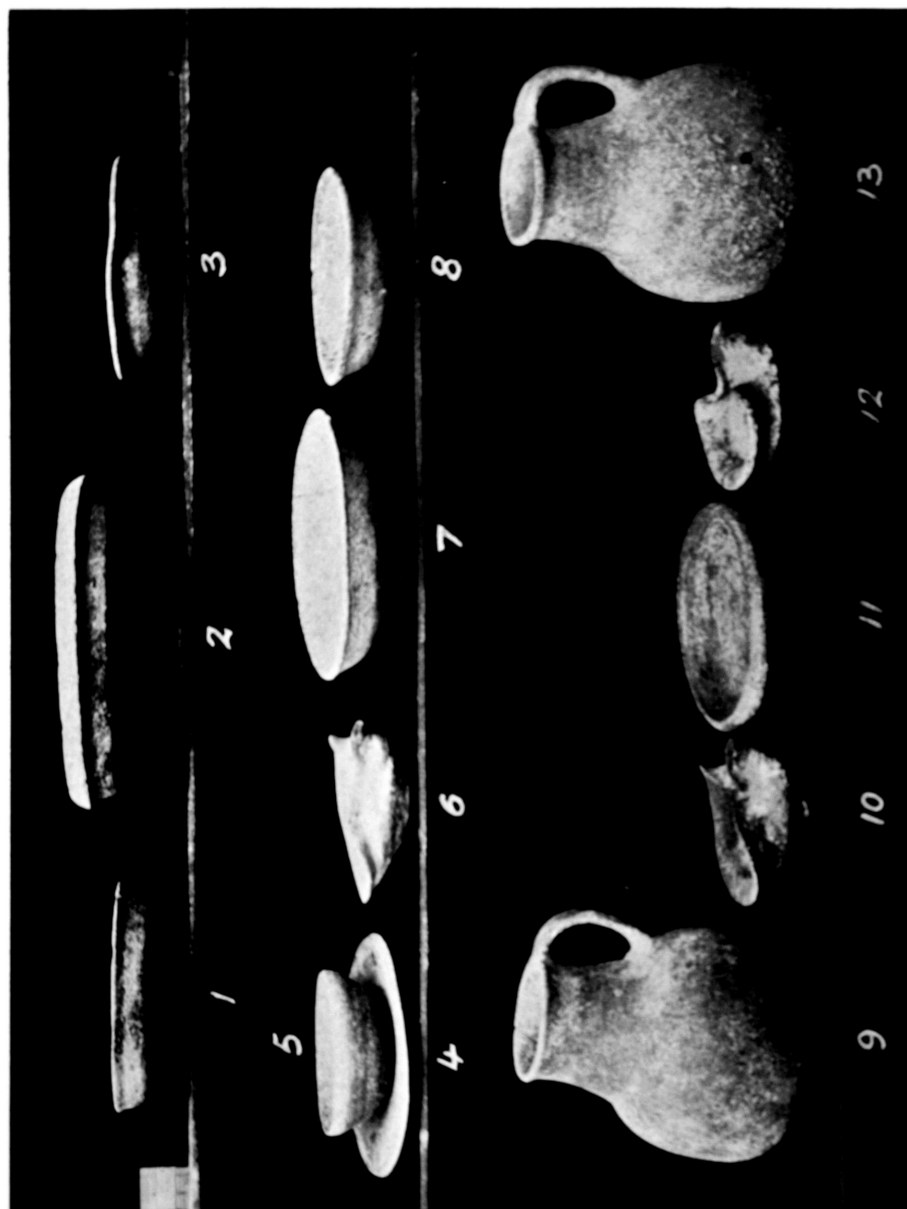
B.



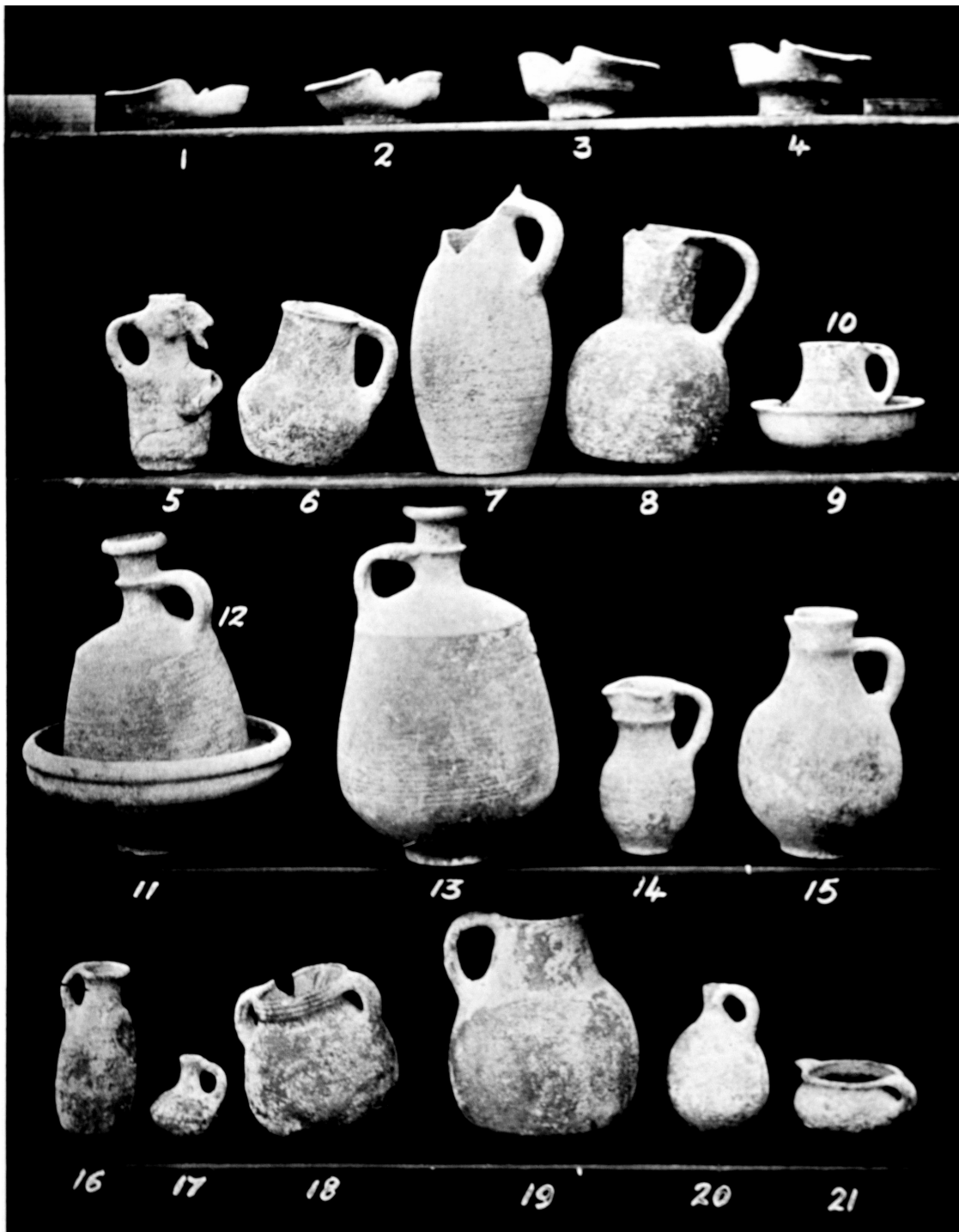
POTTERY FROM TOMB 6 AND COMPARISON OF BOWLS.



INTERIOR OF TOMB 7.



POTTERY FROM REPOSITORY OF TOMB 7.



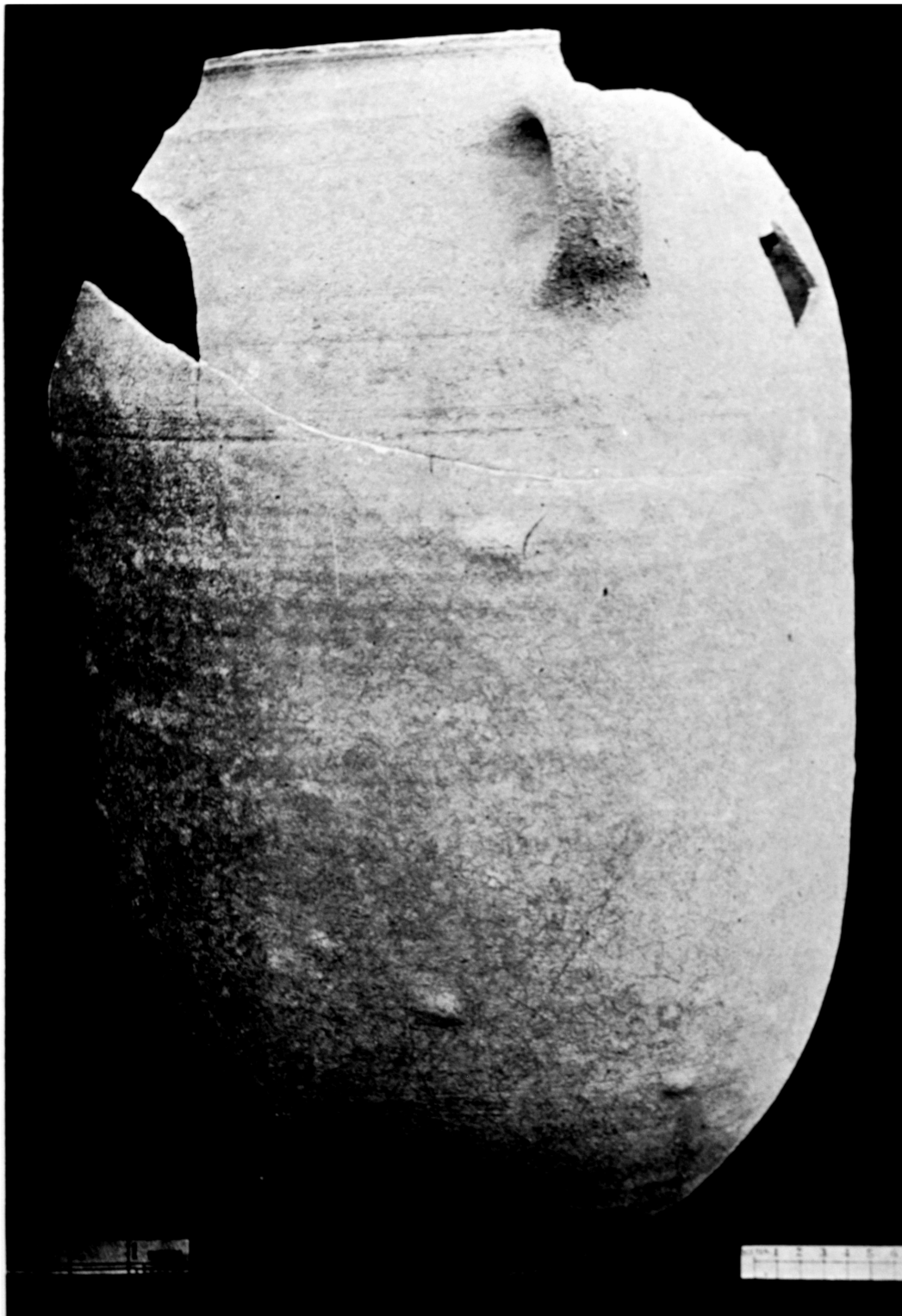
POTTERY FROM TOMB 7.



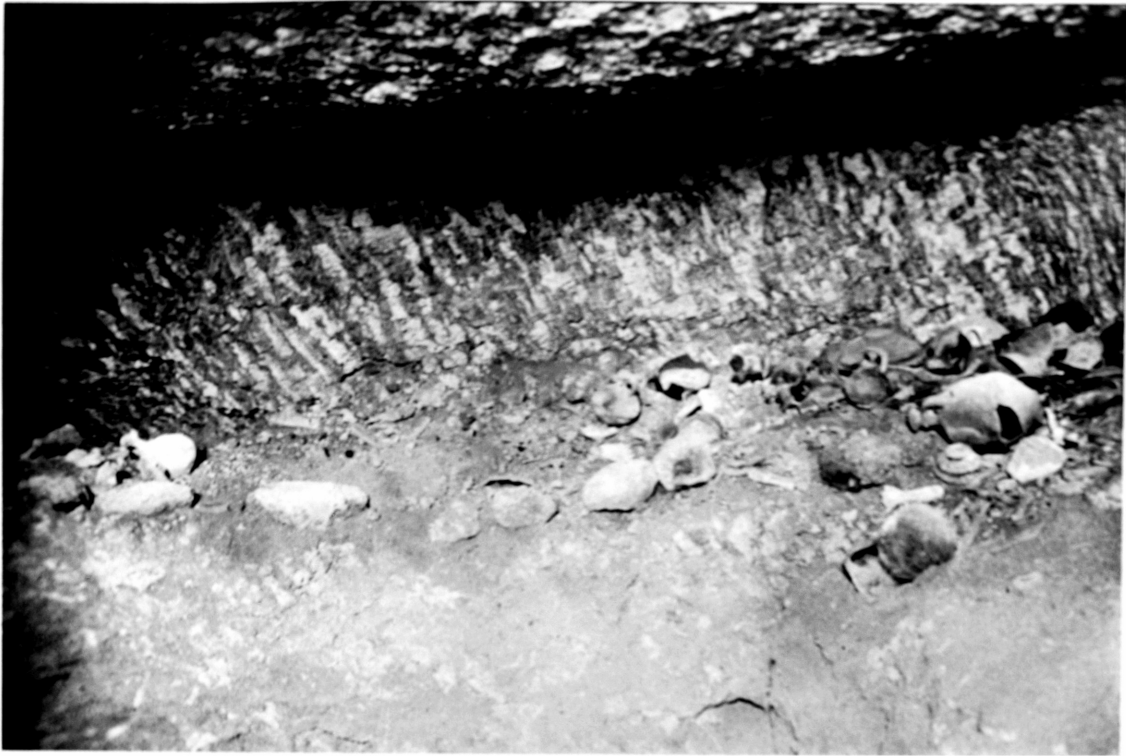
LIBATION VASE FROM TOMB 7.



JAR FROM TOMB 7.



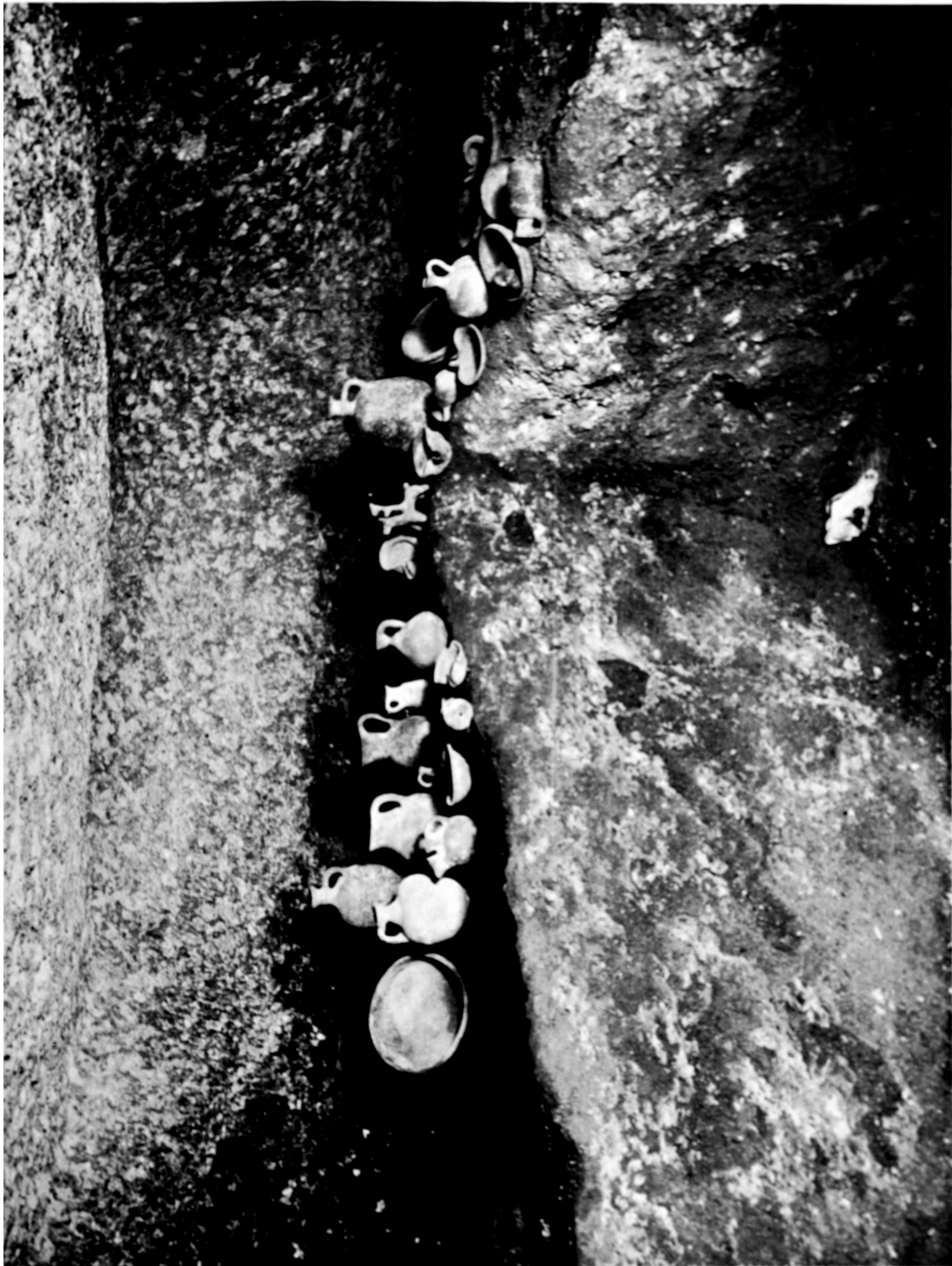
JAR FROM TOMB 7.



INTERIOR OF TOMB S.



INTERIOR OF TOMB 8.



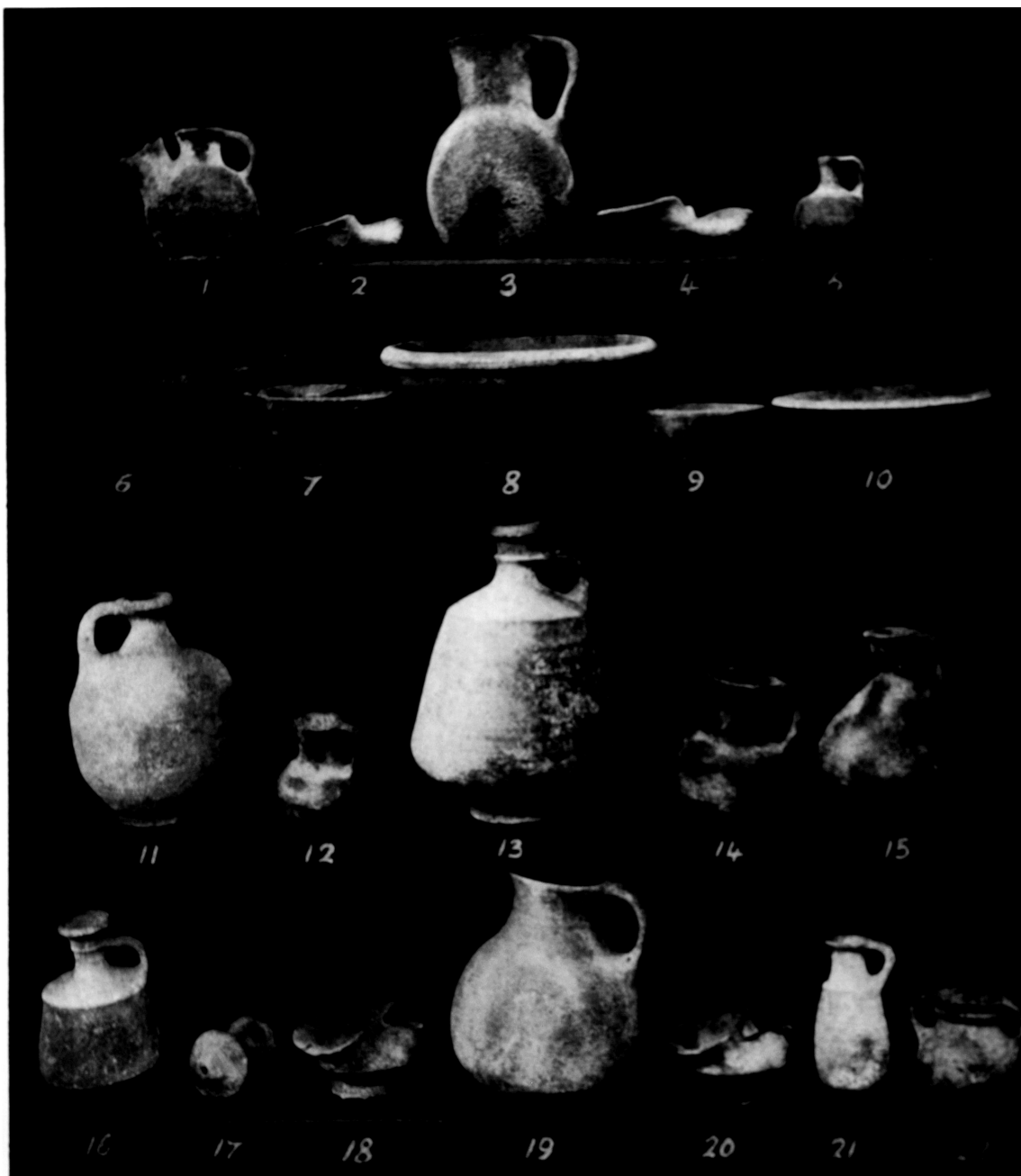
POTTERY REMOVED FROM THE REPERTORY OF TOMB 8



POTTERY FROM REPOSITORY OF TOMB S.



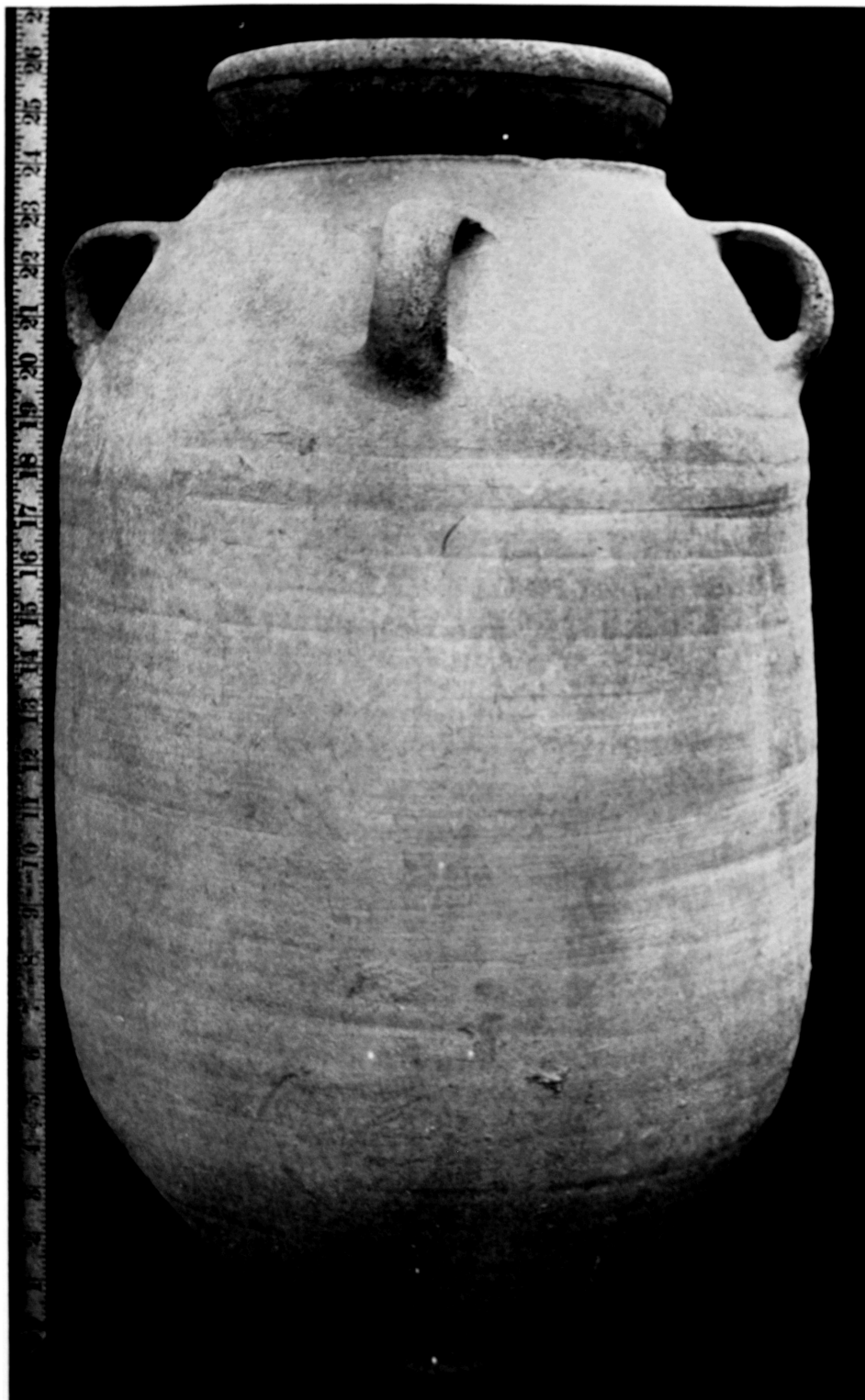
FIGURINE OF HORSE AND RIDER.



POTTERY FROM TOMB 8.

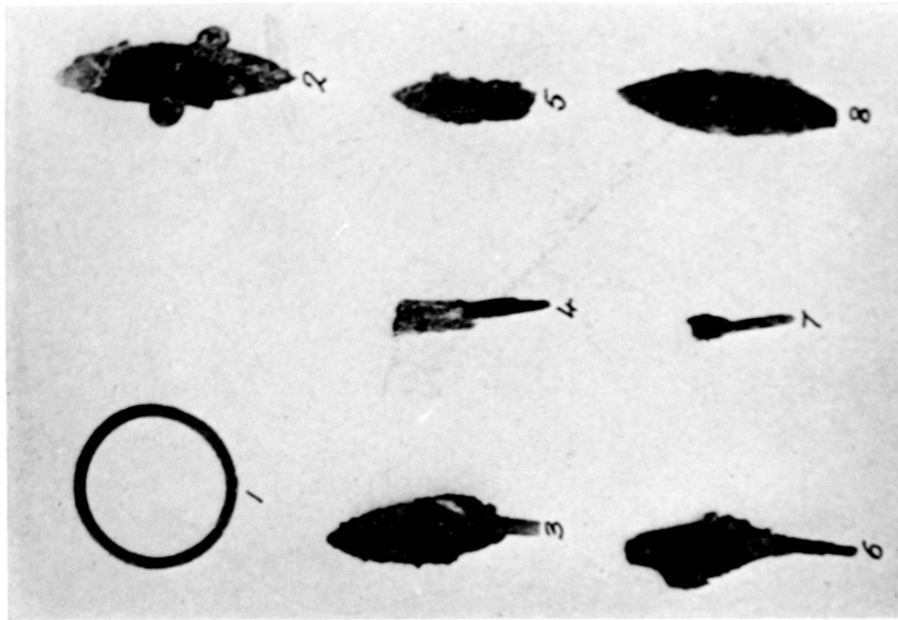


POTTERY FROM TOMB 8.



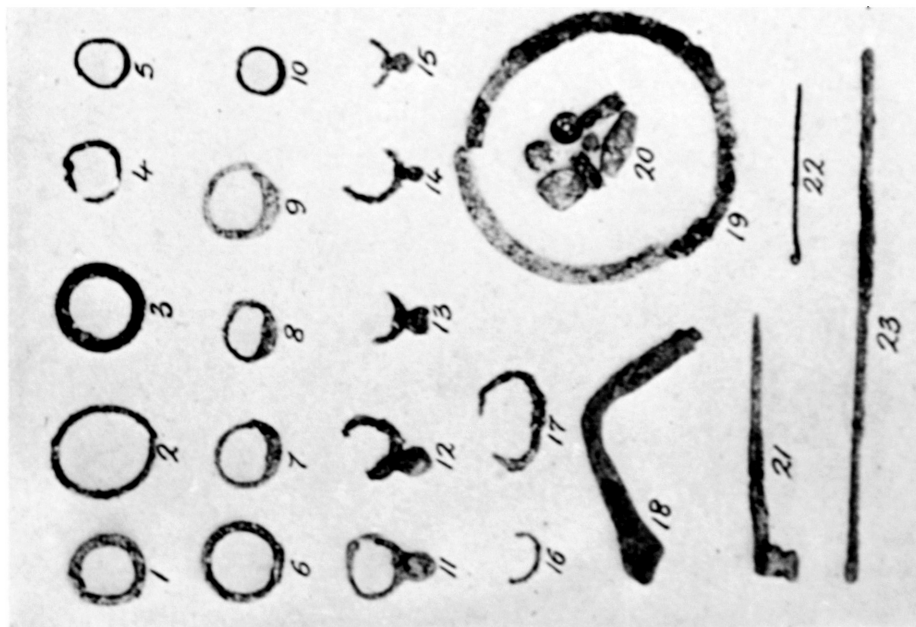
JAR WITH BOWL LID FROM TOMB 8

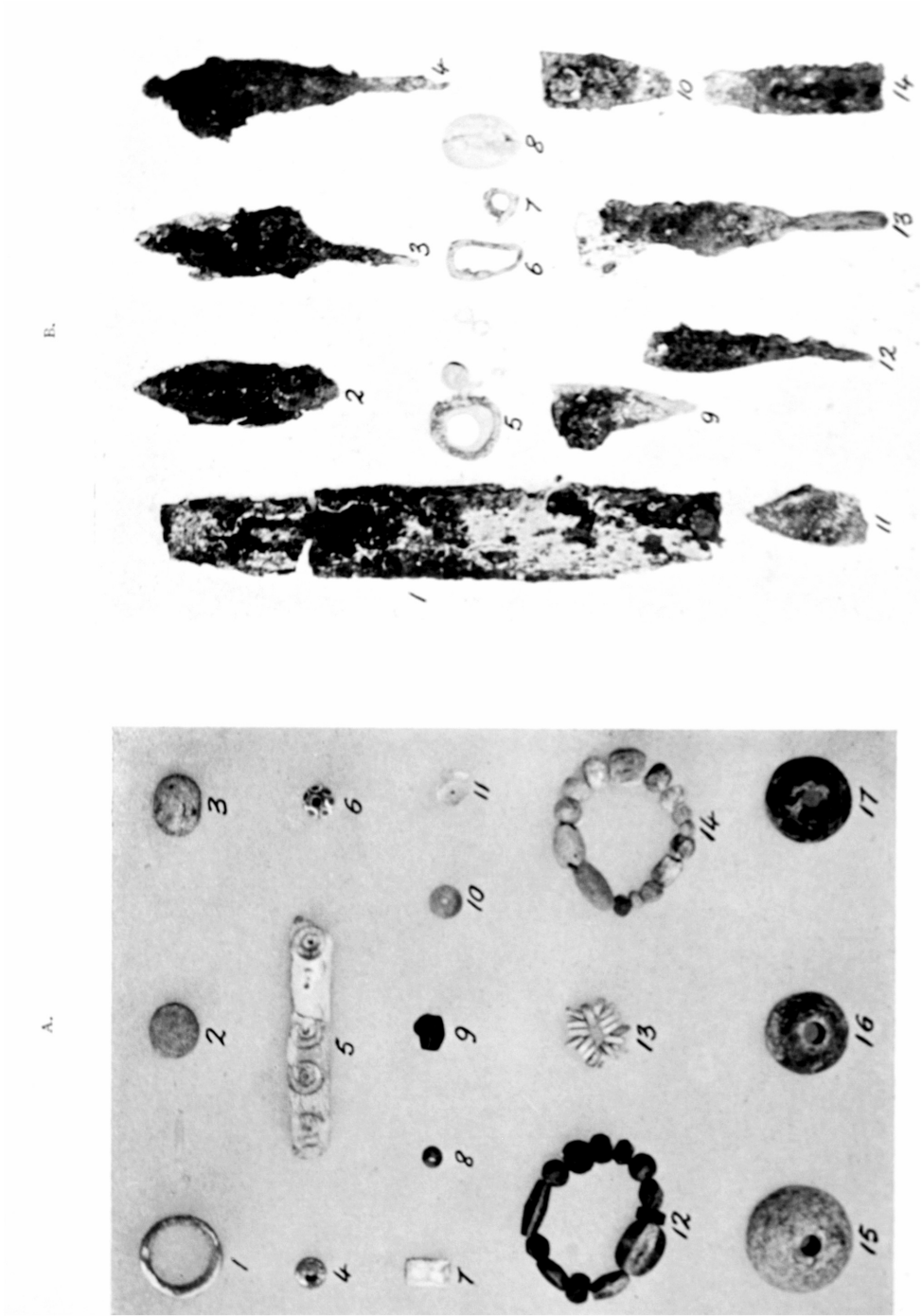
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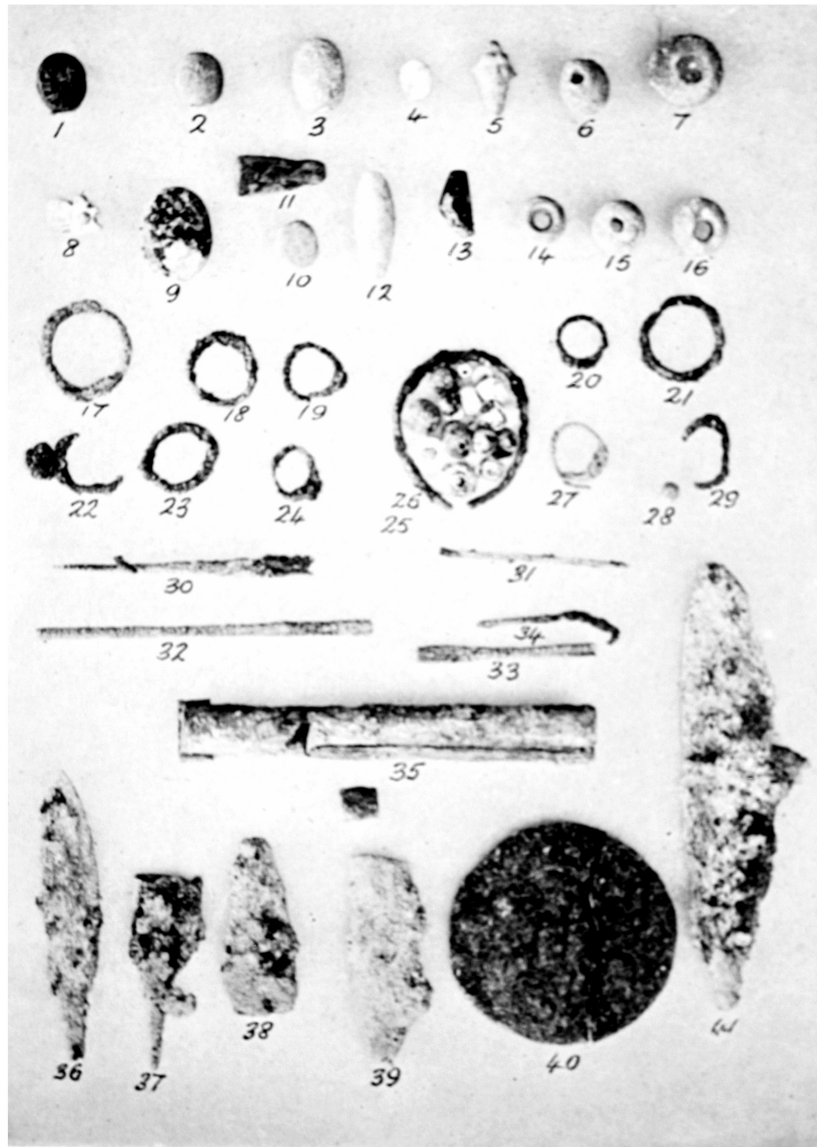
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